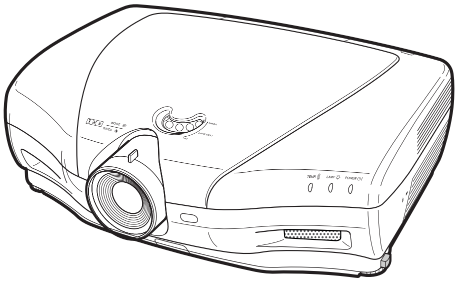
SHARP SERVICE MANUAL

No. S96W3XVZ20000

DLP PROJECTOR



XV-Z20000
XV-Z21000
MODELS DT-5000

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Parts Guide

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

SAFETY PRECAUTION

IMPORTANT SERVICE SAFETY NOTES

IMPORTANT SERVICE SAFETY NOTES (for USA)

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and servicing guidelines as follows:**

WARNING

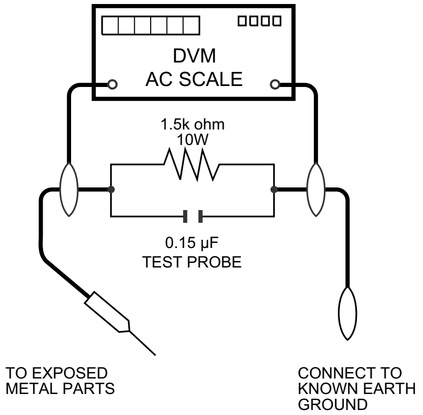
1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

BEFORE RETURNING THE PROJECTOR: (Fire & Shock Hazard)

Before returning the projector to the user, perform the following safety checks:

1. Inspect lead wires are not pinched between the chassis and other metal parts of the projector.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for current leakage in the following manner:

- Plug the AC cord directly into a 120-volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in parallel between all exposed metal cabinet parts and earth ground.
- Use an AC voltmeter with sensitivity of 5000 ohm per volt., or higher, sensitivity to measure the AC voltage drop across the resistor.
- All checks must be repeated with the AC plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these checks.)
  Any reading of 0.3 volts RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in DMD™ Projector have special safety-related characteristics.
These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams. For continued protection, replacement parts must be identical to those used in the original circuit. The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les projecteur à DMD™ présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue.
Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "⚠" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques. Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies ou autres accidents.

WARNING: The bimetallic component has the primary conductive side exposed. Be very careful in handling this component when the power is on.

AVERTISSEMENT: La composante bimétallique dispose du conducteur primaire dénudé. Faire attention lors de la manipulation de cette composante sous tension.

NOTE TO SERVICE PERSONNEL

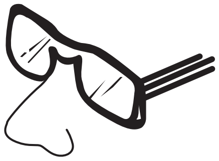
UV-RADIATION PRECAUTION

The light source, UHP lamp, in the LCD projector emits small amounts of UV-Radiation.

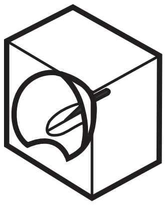
AVOID DIRECT EYE AND SKIN EXPOSURE.

To ensure safety please adhere to the following:

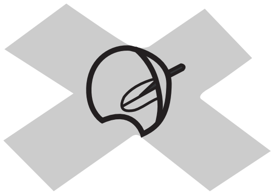
1. Be sure to wear sun-glasses when servicing the projector with the lamp turned "on" and the top enclosure removed.



2. Do not operate the lamp outside of the lamp housing.



3. Do not operate for more than 2 hours with the enclosure removed.



UV-Radiation and Medium Pressure Lamp Precautions

1. Be sure to disconnect the AC plug when replacing the lamp.
2. Allow one hour for the unit to cool down before servicing.
3. Replace only with same type lamp. Type AN-K20LP rated 355V/220W.
4. The lamp emits small amounts of UV-Radiation, avoid direct-eye contact.
5. The medium pressure lamp involves a risk of explosion. Be sure to follow installation instructions described below and handle the lamp with care.

NOTE POUR LE PERSONNEL D'ENTRETIEN

PRECAUTION POUR LES RADIATIONS UV

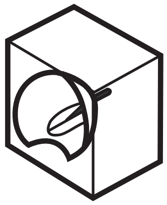
La source de lumière, la lampe UHP, dans le projecteur LCD émet de petites quantités de radiation UV.

EVITEZ TOUTE EXPOSITION DIRECTE DES YEUX ET DE LA PEAU.

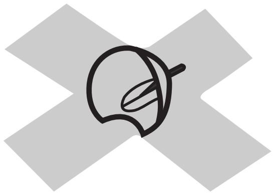
Pour votre sécurité, nous vous prions de respecter les points suivants:

1. Toujours porter des lunettes de soleil lors d'un entretien du projecteur avec la lampe allumée et le haut du coffret retiré.

2. Ne pas faire fonctionner la lampe à l'extérieur du boîtier de lampe.



3. Ne pas faire fonctionner plus de 2 heures avec le coffret retiré.



Précautions pour les radiations UV et la lampe moyenne pression

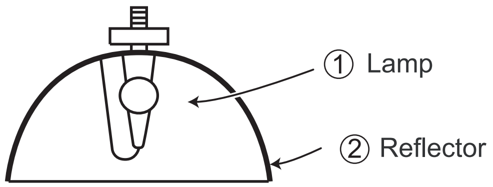
1. Toujours débrancher la fiche AC lors du remplacement de la lampe.
2. Laisser l'unité refroidir pendant une heure avant de procéder à l'entretien.
3. Ne remplacer qu'avec une lampe du même type. Type AK-K20LP, caractéristique 355/220W.
4. La lampe émet de petites quantités de radiation UV- éviter tout contact direct avec les yeux.
5. La lampe moyenne pression implique un risque d'explosion. Toujours suivre les instructions d'installation décrites ci-dessous et manipuler la lampe avec soin.

UV-RADIATION PRECAUTION (Continued)

■ Lamp Replacement

Note:

Since the lamp reaches a very high temperature during units operation replacement of the lamp should be done at least one hour after the power has been turned off. (to allow the lamp to cool off.)
Installing the new lamp, make sure not to touch the lamp (bulb) replace the lamp by holding its reflector ②.
[Use original replacement only.]



DANGER ! — Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages at its start.

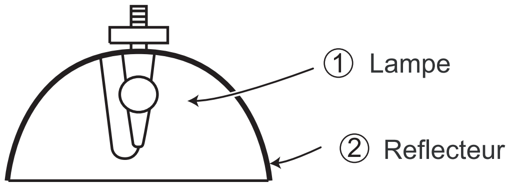
Since small amounts of UV-radiation are emitted from an opening between the exhaust fans, it is recommended to place the cap of the optional lens on the opening during servicing to avoid eye and skin exposure.

PRECAUTION POUR LES RADIATIONS UV (Suite)

■ Remplacement de la lampe

Remarque:

Comme la lampe devient très chaude pendant le fonctionnement de l'unité, son remplacement ne doit être effectué au moins une heure après avoir coupé l'alimentation (pour permettre à la lampe de refroidir).
En installant la nouvelle lampe, s'assurer de ne pas toucher la lampe (ampoule). Remplacer la lampe en tenant son réflecteur ②.
[N'utiliser qu'un remplacement d'origine.]



DANGER ! — Ne jamais mettre sous tension sans la lampe pour éviter un choc électrique ou des dommages des appareils car le stabilisateur génère de hautes tensions à sa mise en route.

Comme de petites quantités de radiation UV sont émises par une ouverture entre les ventilateurs aspirants, il est recommandé de placer le capuchon de l'optique optionnelle sur l'ouverture pendant l'entretien pour éviter une exposition des yeux et la peau.

WARNING: High brightness light source, do not stare into the beam of light, or view directly. Be especially careful that children do not stare directly in to the beam of light.

WARNING: **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO MOISTURE OR WET LOCATIONS.**

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT REMOVE SCREWS
EXCEPT SPECIFIED USER
SERVICE SCREW.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE CABINET.
NO USER-SERVICEABLE PARTS EXCEPT LAMP UNIT.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.

The lighting flash with arrowhead within a triangle is intended to tell the user that parts inside the product are risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the manual with the projector.

CAUTION
(POWER Unit)

For continued protection against a risk of fire, replace only with same type
6.3AH, AC250V fuse (F701)
1.6AL, AC250V fuse (F702)

* * *

AVERTISSEMENT: Source lumineuse de grande intensité. Ne pas fixer le faisceau lumineux ou le regarder directement. Veiller particulièrement à éviter que les enfants ne fixent directement le faisceau lumineux.

AVERTISSEMENT: **AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION, NE PAS PLACER CET APPAREIL DANS UN ENDROIT HUMIDE OU MOUILLE.**

ATTENTION

RISQUE D'ÉLECTROCUTION.
NE PAS RETIRER LES VIS
À L'EXCEPTION DE LA VIS
RÉSERVÉE À L'ENTRETIEN.

ATTENTION: POUR EVITER TOUT RISQUE
D'ELECTROCUTION, NE PAS RETIRER LE CAPOT.
AUCUNE DES PIECES INTERIEURES N'EST REPARABLE
PAR L'UTILISATEUR, A L'EXCEPTION DE L'UNITE DE
LAMPE. POUR TOUTE REPARATION, S'ADRESSER A UN
TECHNICIEN D'ENTRETIEN QUALIFIE.

L'éclair terminé d'une flèche à l'intérieur d'un triangle indique à l'utilisateur que les pi‘eces se trouvant dans l'appareil sont susceptibles de provoquer une décharge électrique.

Le point d'exclamation à l'intérieur d'un triangle indique à l'utilisateur que les instructions de fonctionnement et d'entretien sont détaillées dans les documents fournis avec le projecteur.

PRECAUTION
(Unité de PUTSSANCE)

Pour une protection continue contre un risques d'incendie, ne remplacer qu'avec un
fusible 6.3AH, AC250V fuse (F701)
1.6AL, AC250V fuse (F702)

Precautions for using lead-free solder

■Employing lead-free solder

- "PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

  Example:

  LFa

  Sn-Ag-Cu

  Indicates lead-free solder of tin, silver and copper.

■Using lead-free wire solder

- When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

  As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

■Soldering

- As the melting point of lead-free solder (Sn-Ag-Cu) is about 220 °C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

  Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

  If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

  When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

- Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No.	★	Description	Code
ZHNDAi123250E	J	ϕ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm 1kg(1roll)	BM

CHAPTER 1. OPERATION MANUAL

[1] Specifications

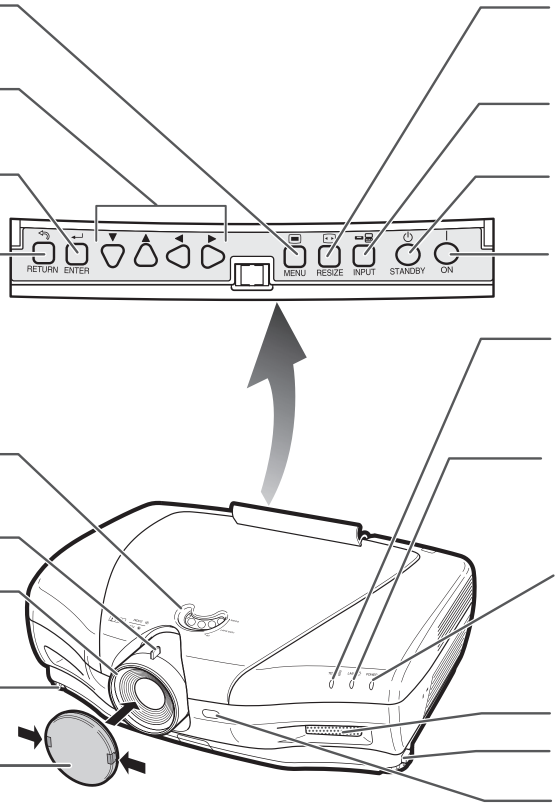
Specifications

Product type	Projector
Model	XV-Z20000/XV-Z21000/DT-5000
Video system	NTSC 3.58/NTSC 4.43/PAL/PAL-M/PAL-N/PAL 60/SECAM DTV480I/DTV480P/DTV720P/DTV1080I/DTV1080P
Display method	DLP® chip
DLP® panel	Panel size: 0.95" No. of dots: 2,073,600 dots (1,920 [H] × 1,080 [V])
Lens	1–1.35 × zoom lens, F2.5–8, f = 38.9–52.4 mm
Projection lamp	220 W SHP lamp
Video input signal	RCA Connector: VIDEO (VIDEO), composite video, 1.0 Vp-p, sync negative, 75 Ω terminated
S-video input signal	4-pin Mini DIN connector (S-VIDEO) Y (luminance signal): 1.0 Vp-p, sync negative, 75 Ω terminated C (chrominance signal): Burst 0.286 Vp-p, 75 Ω terminated
Component input signal	RCA Connector (COMPONENT/RGB1, 2) Y: 1.0 Vp-p, sync negative, 75 Ω terminated P_B: 0.7 Vp-p, 75 Ω terminated P_R: 0.7 Vp-p, 75 Ω terminated
Analog RGB/Digital input signal	29-pin DVI-I terminal (DVI) <Digital> Input impedance 50 Ω Input level 250-1000 mV <Analog> Input Impedance 75 Ω Input level 0.7 Vp-p <Synchronization signal> • Separate sync / Composite sync Input level TTL level Input impedance 1 KΩ • Green on sync Input level (Synchronizing input) 0.286 Vp-p Input Impedance 75 Ω
HDMI input signal	HDMI terminal (Video signal only)
TRIGGER terminal	Power jack: DC 12 V output
Computer control signal	9-pin D-sub connector (RS-232C Terminal)
Horizontal resolution	520 TV lines (NTSC 3.58 input), 1080 TV lines (DTV 1080P input)
Pixel clock	12–150 MHz
Vertical frequency	43–100 Hz
Horizontal frequency	15–81 kHz
Rated voltage	AC 100–240 V
Input current	3.3 A (When using AC 100 V)
Rated frequency	50/60 Hz
Power consumption	320 W (Lamp Setting "Bright")/ 265 W (Lamp Setting "Eco + Quiet") with AC 100 V 310 W (Lamp Setting "Bright")/ 260 W (Lamp Setting "Eco + Quiet") with AC 240 V
Power consumption (standby)	0.1 W (AC 100 V, RS-232C OFF) - 0.18 W (AC 240 V, RS-232C OFF)
Heat dissipation	1,200 BTU/hour
Operating temperature	41°F to 95°F (+5°C to +35°C)
Storage temperature	–4°F to 140°F (–20°C to +60°C)
Cabinet	Plastic
I/R carrier frequency	38 kHz
Dimensions (approx.)	18 $^{11}/_{16}$" × 6 $^{51}/_{64}$" × 16 $^{5}/_{32}$" (475 (W) × 172.5 (H) × 410.2 (D) mm) (main body only)
Weight (approx.)	20.7 lbs. (9.4 kg)
Replacement parts	Remote control, Power cord, Lens cap, Terminal cover, Projector operation manual

As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Part Names and Functions

Projector



MENU button
For displaying adjustment and setting screens.

Adjustment buttons (▼, ▲, ◀, ▶)
For selecting menu items.

ENTER button
For setting items selected or adjusted on the menu.

RETURN button
For undoing an operation.

RESIZE button
For switching the screen size (SIDE BAR, SMART STRETCH, etc.).

INPUT button
For displaying the Input list.

STANDBY button
For putting the projector into the standby mode.

ON button
For turning the power on.

Temperature warning indicator
When the internal temperature rises, this indicator will illuminate red.

Lamp indicator
Illuminates blue, indicating normal function. Replace the lamp when the indicator illuminates red.

Power indicator
Illuminates red, when the projector is in standby. When the power is turned on, this indicator will illuminate blue.

Lens shift dial
For moving the projected image vertically.

Zoom knob

Focus ring

Adjustment foot

Lens cap
Pressing the two tabs, you can remove/attach the lens cap.

Intake vent

Adjustment foot

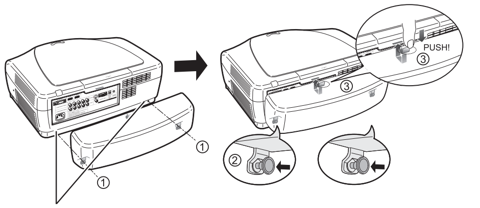
Remote control sensor

Using the Terminal Cover

When the projector is used on a desktop, high mounted or ceiling mounted, attach the terminal cover (supplied) to hide the connecting cables.

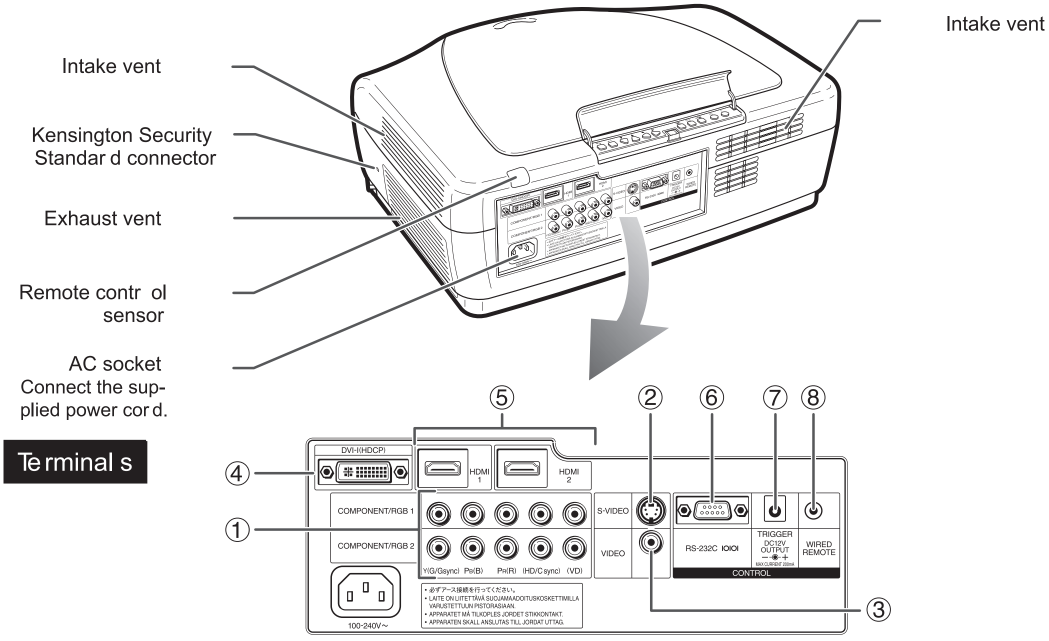
Attaching the Terminal Cover

① Align the hook on the terminal cover with the insert hole in the hook at the back of the projector.
② Press the hook in the direction indicated with the arrow to fasten the terminal cover to the projector.
③ Insert the terminal cover into the mounting groove on the projector while pushing the tabs inside the terminal cover to the outside with your fingers.



Remove the rubber cap attached on the projector and attach the hooks.

Projector (Rear View)


Intake vent
Kensington Security Standard connector
Exhaust vent
Remote control sensor
AC socket
Connect the supplied power cord.
Intake vent
Terminals
⑤
②
⑥
⑦
⑧
④
①
③
DVI-I(HDCP)
HDMI 1
HDMI 2
COMPONENT/RGB 1
COMPONENT/RGB 2
Y(G/Gsync) PB(B) PR(R) (HD/C sync) (VD)
S-VIDEO
VIDEO
RS-232C
TRIGGER DC12V OUTPUT
MAX CURRENT 200mA
WIRED REMOTE
CONTROL
100-240V~
• 必ずアース接続を行ってください。
• LAITE ON LIITETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.
• APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.
• APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

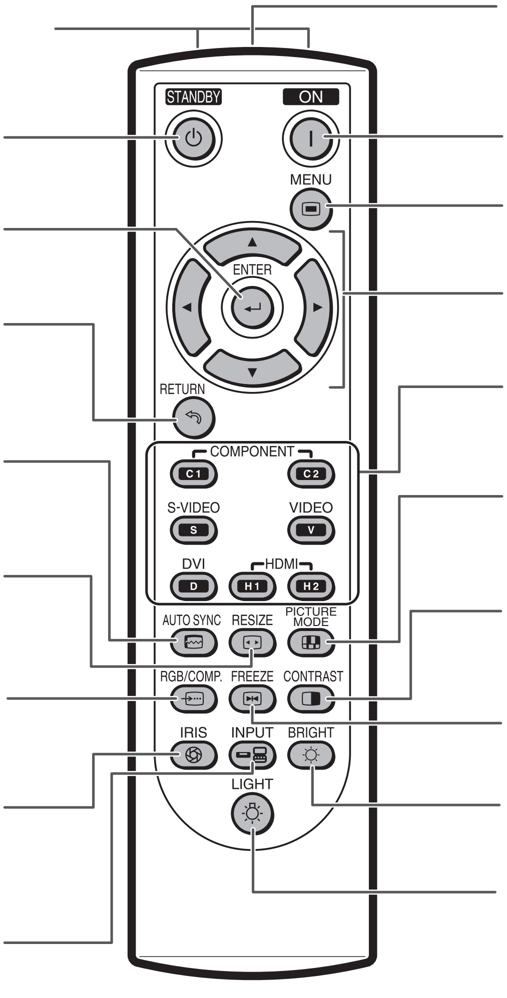
Terminal	Description
①	COMPONENT/RGB1, 2 terminals Connecting video equipment with component output terminal (DVD player, etc.) or a computer with analog RGB output terminal.
②	S-VIDEO terminal Connecting video equipment with S-video output terminal (DVD player, VCR, etc.).
③	VIDEO terminal Connecting video equipment without S-video output terminal.
④	DVI terminal Connecting video equipment with DVI output terminal (DVD player, DTV decoder, computer, etc.).
⑤	HDMI1, 2 terminals Connecting video equipment with HDMI output terminal.
⑥	RS-232C terminal Connecting a computer to control the projector.
⑦	TRIGGER terminal When the projector is turned on, a control signal (DC 12V) outputs from this terminal. If an electric screen or other compatible device is connected, it can be turned on when the projector is turned on.
⑧	WIRED REMOTE control input terminal Connecting the remote control via a cable when the projector is placed out of the reach of remote control signals.

Using the Kensington Lock

- This projector has a Kensington Security Standard connector for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the projector.

Part Names and Functions (Continued)

Remote Control


STANDBY
ON
MENU
ENTER
RETURN
COMPONENT
C1
C2
S-VIDEO
VIDEO
S
V
DVI
HDMI
D
H1
H2
AUTO SYNC
RESIZE
PICTURE MODE
RGB/COMP.
FREEZE
CONTRAST
IRIS
INPUT
BRIGHT
LIGHT

Remote control signal transmitters

STANDBY button
For putting the projector into the standby mode.

ENTER button
For setting items selected or adjusted on the menu.

RETURN button
For undoing an operation.

AUTO SYNC button
For automatically adjusting images when connected to a computer.

RESIZE button
For switching the screen size (SIDE BAR, SMART STRETCH, etc.).

RGB/COMP. button
For switching to the respective input signal type.

IRIS button
For switching “HIGH BRIGHTNESS MODE”, “MEDIUM MODE” and “HIGH CONTRAST MODE”.

INPUT button
For displaying the Input list.

WIRED R/C JACK
For controlling the projector by connecting the remote control to the projector.

ON button
For turning the power on.

MENU button
For displaying adjustment and setting screens.

Adjustment buttons
(▼, ▲, ◀, ▶)
For selecting menu items.

Input Mode Select buttons
For switching to the respective input modes.

PICTURE MODE button
For selecting the appropriate picture to best match the projected image.

CONTRAST button
For displaying the contrast adjustment screen.

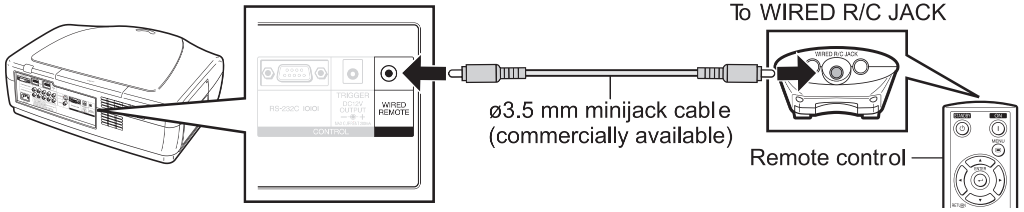
FREEZE button
For freezing images.

BRIGHT button
For displaying the brightness adjustment screen.

LIGHT button
For lighting all buttons on the remote control.

Connecting the Remote Control to the Projector

When the remote control cannot be used due to the range or positioning of the projector, connect a ø3.5 mm minijack cable (commercially available) from the WIRED R/C JACK on the top of the remote control to the WIRED REMOTE control input terminal on the rear of the projector.


RS-232C
TRIGGER
DC12V OUTPUT
WIRED REMOTE
CONTROL
WIRED R/C JACK

To WIRED REMOTE control input terminal

To WIRED R/C JACK

ø3.5 mm minijack cable (commercially available)

Remote control

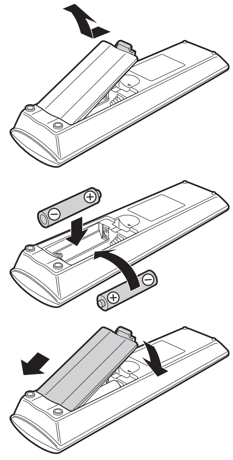
Using the Remote Control

Inserting the Batteries

1 Pull down the tab on the cover and remove the cover towards the direction of the arrow.

2 Insert the supplied batteries and put back the cover.

- Make sure the polarities correctly match the ⊕ and ⊖ marks inside the battery compartment.
- When putting back the cover, be sure that the cover clicks in place and settles.



Usable Range

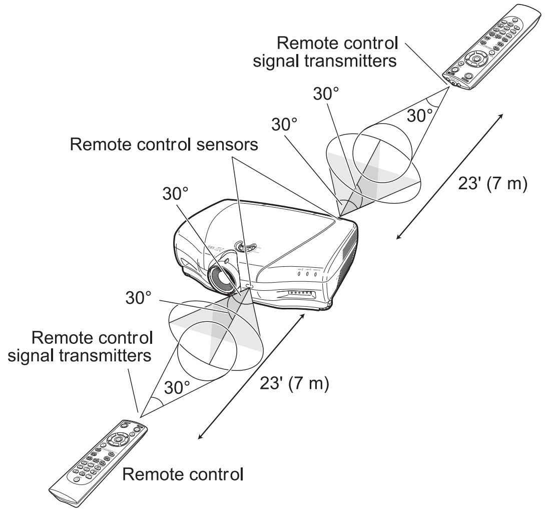
The remote control can be used to control the projector within the ranges shown in the illustration.

Note

- The signal from the remote control can be reflected off a screen for easy operation. However, the effective distance of the signal may differ depending on the screen material.

When using the remote control:

- Be sure not to drop, expose to moisture or high temperature.
- The remote control may malfunction under a fluorescent lamp. In this case, move the projector away from the fluorescent lamp.



Incorrect use of the batteries may cause them to leak or explode. Please follow the precautions below.

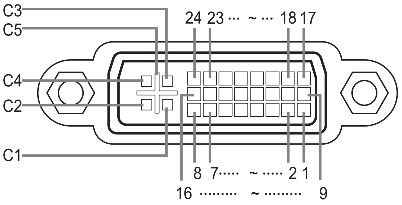
⚠ Caution

- Danger of explosion if bettery is incorrectly replaced.
  Replace only with the same or equivalent type.
- Insert the batteries making sure the polarities correctly match the ⊕ and ⊖ marks inside the battery compartment.
- Batteries of different types have different properties, therefore do not mix batteries of different types.
- Do not mix new and old batteries.
  This may shorten the life of new batteries or may cause old batteries to leak.
- Remove the batteries from the remote control once they have run out, as leaving them in can cause them to leak.
  Battery fluid from leaked batteries is harmful to skin, therefore be sure to first wipe them and then remove them using a cloth.

- The batteries included with this projector may run down in a short period, depending on how they are kept.
  Be sure to replace them as soon as possible with new batteries.
- Remove the batteries from the remote control if you are not to use the remote control for a long time.
- Comply with the rules (ordinance) of each local government when disposing of worn-out batteries.

Connecting Pin Assignments

DVI-I Terminal: 29-pin connector



• DVI Digital Input

Pin No.	Signal	Pin No.	Signal
1	T.M.D.S data 2–	16	Hot plug detection
2	T.M.D.S data 2+	17	T.M.D.S data 0–
3	T.M.D.S data 2 shield	18	T.M.D.S data 0+
4	Not connected	19	T.M.D.S data 0 shield
5	Not connected	20	Not connected
6	DDC clock	21	Not connected
7	DDC data	22	T.M.D.S clock shield
8	Not connected	23	T.M.D.S clock+
9	T.M.D.S data 1–	24	T.M.D.S clock–
10	T.M.D.S data 1+	C1	Not connected
11	T.M.D.S data 1 shield	C2	Not connected
12	Not connected	C3	Not connected
13	Not connected	C4	Not connected
14	+5V power	C5	Ground
15	Ground		

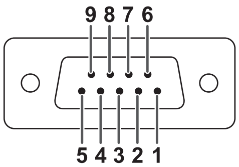
• DVI Analog RGB Input

Pin No.	Signal	Pin No.	Signal
1	Not connected	16	Hot plug detection
2	Not connected	17	Not connected
3	Not connected	18	Not connected
4	Not connected	19	Not connected
5	Not connected	20	Not connected
6	DDC clock	21	Not connected
7	DDC data	22	Not connected
8	Vertical sync	23	Not connected
9	Not connected	24	Not connected
10	Not connected	C1	Analog input Red
11	Not connected	C2	Analog input Green
12	Not connected	C3	Analog input Blue
13	Not connected	C4	Horizontal sync
14	+5V power	C5	Ground
15	Ground		

• DVI Analog Component Input

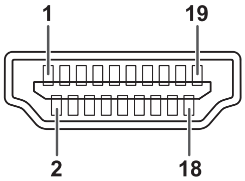
Pin No.	Signal	Pin No.	Signal
1	Not connected	16	Not connected
2	Not connected	17	Not connected
3	Not connected	18	Not connected
4	Not connected	19	Not connected
5	Not connected	20	Not connected
6	Not connected	21	Not connected
7	Not connected	22	Not connected
8	Not connected	23	Not connected
9	Not connected	24	Not connected
10	Not connected	C1	Analog input P_R/C_R
11	Not connected	C2	Analog input Y
12	Not connected	C3	Analog input P_B/C_B
13	Not connected	C4	Not connected
14	Not connected	C5	Ground
15	Ground		

RS-232C Terminal: 9-pin D-sub male connector



Pin No.	Signal	Name	I/O	Reference
1				Not connected
2	RD	Receive Data	Input	Connected to internal circuit
3	SD	Send Data	Output	Connected to internal circuit
4		Reserved		Connected to internal circuit
5	SG	Signal Ground		Connected to internal circuit
6		Reserved		Connected to internal circuit
7		Reserved		Connected to internal circuit
8		Reserved		Connected to internal circuit
9				Not connected

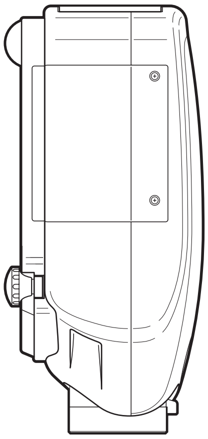
HDMI Terminal

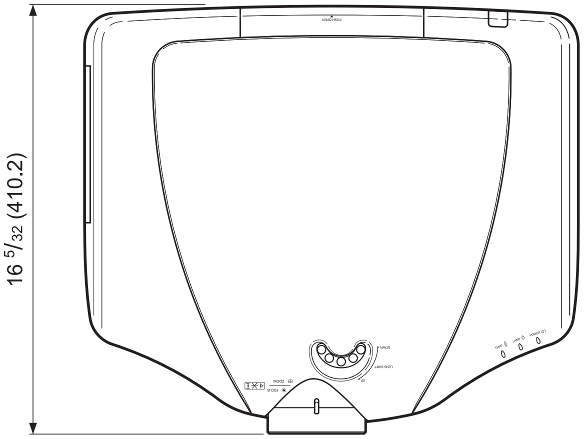


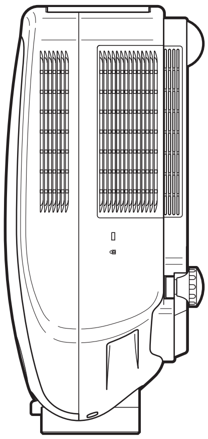
Pin No.	Name	Pin No.	Name	Pin No.	Name
1	T.M.D.S data 2+	8	T.M.D.S data 0 shield	14	Reserved
2	T.M.D.S data 2 shield	9	T.M.D.S data 0–	15	SCL
3	T.M.D.S data 2–	10	T.M.D.S clock+	16	SDA
4	T.M.D.S data 1+	11	T.M.D.S clock shield	17	DDC/CEC ground
5	T.M.D.S data 1 shield	12	T.M.D.S clock–	18	+5V power
6	T.M.D.S data 1–	13	CEC	19	Hot plug detection
7	T.M.D.S data 0+				

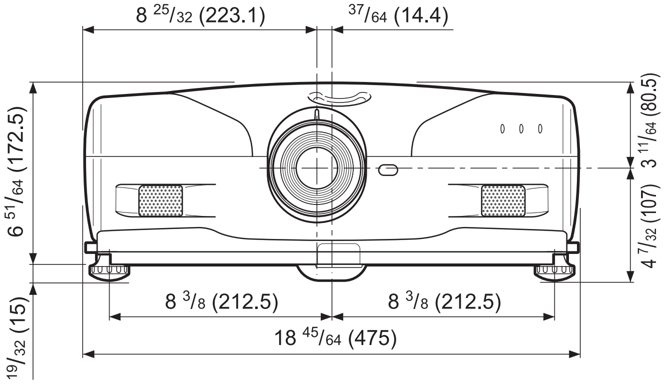
[3] DIMENSIONS

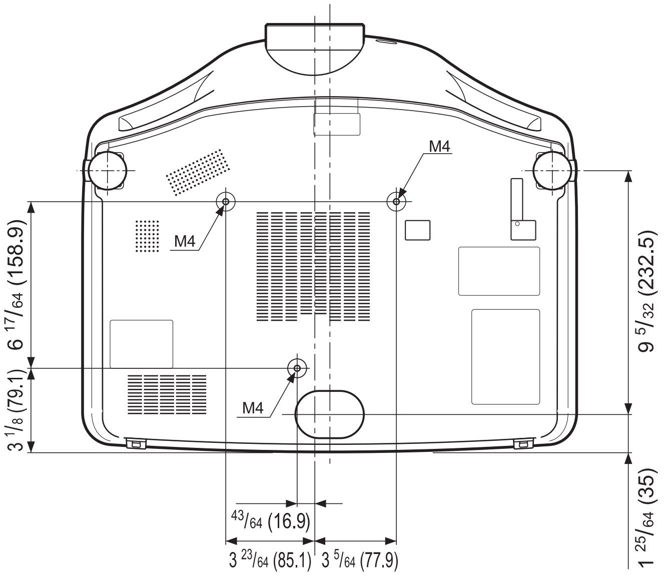
Units: inch (mm)

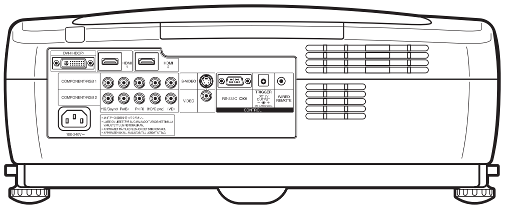







8 25/32 (223.1)
37/64 (14.4)
6 51/64 (172.5)
3 11/64 (80.5)
4 7/32 (107)
8 3/8 (212.5)
8 3/8 (212.5)
18 45/64 (475)
19/32 (15)


M4
M4
M4
6 17/64 (158.9)
3 1/8 (79.1)
9 5/32 (232.5)
1 25/64 (35)
43/64 (16.9)
3 23/64 (85.1)
3 5/64 (77.9)



Regarding the Lamp

Lamp

- **It is recommended that the lamp be replaced with a new one (sold separately) when the remaining lamp life becomes 5% or less, or when you notice a significant deterioration in the picture and color quality. The lamp life (percentage) can be checked with the on-screen display.**
- **Purchase a replacement lamp of type AN-K20LP from your place of purchase, nearest Sharp Authorized Service Center or Dealer.**

IMPORTANT NOTE TO U.S. CUSTOMERS:
The lamp included with this projector is backed by a 90-day parts and labor limited warranty. All service of this projector under warranty, including lamp replacement, must be obtained through a Sharp Authorized Service Center or Dealer. For the name of the nearest Sharp Authorized Service Center or Dealer, please call toll-free: 1-888-GO-SHARP (1-888-467-4277).

Hg LAMP CONTAINS MERCURY For State Lamp Disposal Information
www.lamprecycle.org or 1-800-BE-SHARP

U.S.A. ONLY

Caution Concerning the Lamp

- **This projector utilizes a pressurized mercury lamp. A loud sound may indicate lamp failure. Lamp failure can be attributed to numerous sources such as: excessive shock, improper cooling, surface scratches or deterioration of the lamp due to a lapse of usage time.**
  The period of time up to failure largely varies depending on the individual lamp and/or the condition and the frequency of use. It is important to note that failure can often result in the bulb cracking.
- **When the lamp replacement indicator and on-screen display icon are illuminated, it is recommended that the lamp be replaced with a new one immediately, even if the lamp appears to be operating normally.**
- **Should the lamp break, the glass particles may spread inside the lamp cage or gas contained in the lamp may be vented into the room from the exhaust vent. Because the gas in this lamp includes mercury, ventilate the room well if the lamp breaks and avoid all exposure to the released gas. In case of exposure to the gas, consult a doctor as soon as possible.**
- **Should the lamp break, there is also a possibility that glass particles may spread inside of the projector. In such a case, it is recommended you contact your nearest Sharp Authorized Service Center or Dealer to assure safe operation.**

Replacing the Lamp

Caution

- Do not remove the lamp unit from the projector right after use. The lamp will be very hot and may cause burn or injury.
- Wait at least one hour after the power cord is disconnected to allow the surface of the lamp unit to fully cool before removing the lamp unit.

- **Carefully change the lamp by following the instructions described in this section. *If you wish, you may have the lamp replaced at your nearest Sharp Authorized Service Center or Dealer.**

* If the new lamp does not light after replacement, take your projector to the nearest Sharp Authorized Service Center or Dealer for repair.

Removing and Installing the Lamp Unit

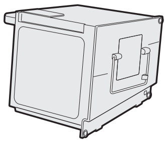
⚠Warning!

- The lamp unit becomes very hot while the projector is operating. Do not remove the lamp unit from the projector right after use. The lamp and parts around the lamp will be very hot and may cause burns or injury.

Info

- Be sure to remove the lamp unit by the handle. Be sure not to touch the glass surface of the lamp unit or the inside of the projector.
- To avoid injury to yourself and damage to the lamp, be sure to carefully follow the steps below.
- Do not loosen other screws than for the lamp unit cover and lamp unit.
  (As for the lamp unit, only the silver screws are loosened.)

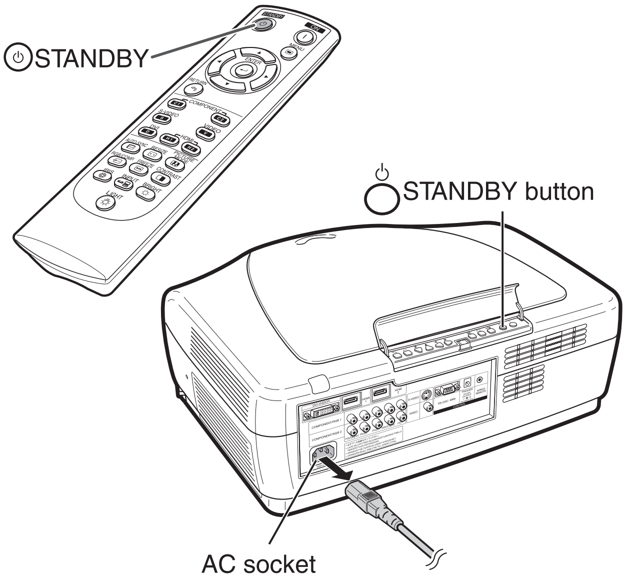
Optional accessory



Lamp unit
(Type: AN-K20LP)

1 Press ⏻STANDBY on the projector or ⏻STANDBY on the remote control to put the projector into the standby mode.

- Wait until the cooling fan stops.

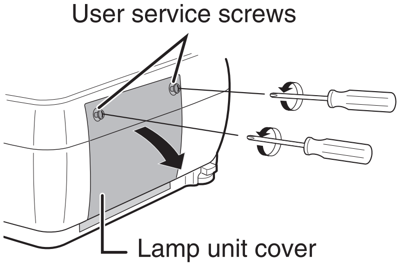


2 Disconnect the power cord.

- Unplug the power cord from the AC socket.
- Leave the lamp until it has fully cooled down (about 1 hour).

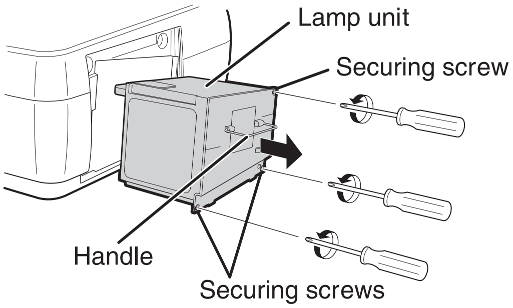
3 Remove the lamp unit cover.

- Loosen the user service screws that secure the lamp unit cover. Then open the cover in the direction of the arrow.

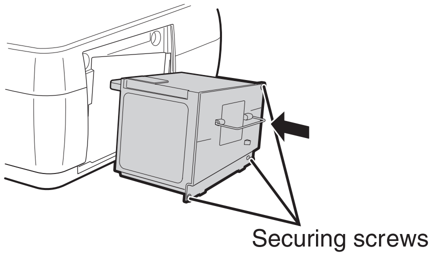


4 Remove the lamp unit.

- Loosen the securing screws from the lamp unit. Hold the lamp unit by the handle and pull it in the direction of the arrow.



Regarding the Lamp (Continued)

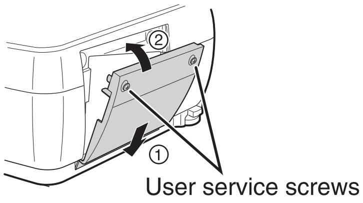

Securing screws

5 Insert the new lamp unit.

- Press the lamp unit firmly into the lamp unit compartment. Fasten the securing screws.

6 Attach the lamp unit cover.

- Close the lamp unit cover in the direction of the arrow. Then tighten the user service screws.


②
①
User service screws

Info

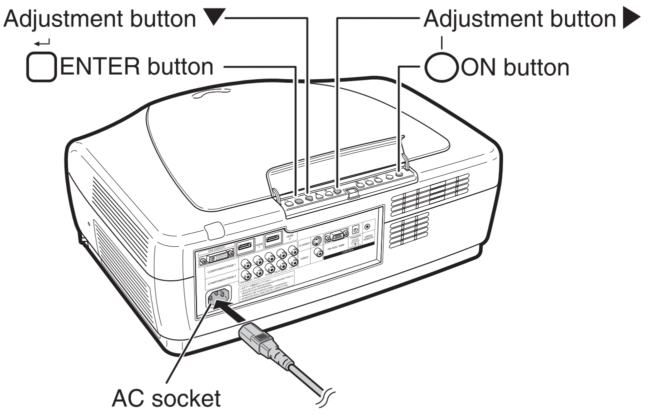
- If the lamp unit and lamp unit cover are not correctly installed, the power will not turn on, even if the power cord is connected to the projector.

Resetting the Lamp Timer

Reset the lamp timer after replacing the lamp.

Info

- Make sure to reset the lamp timer only when replacing the lamp. If you reset the lamp timer and continue to use the same lamp, this may cause the lamp to become damaged or explode.


Adjustment button ▼
ENTER button
Adjustment button ▶
ON button
AC socket

1 Connect the power cord.

- Plug the power cord into the AC socket of the projector.

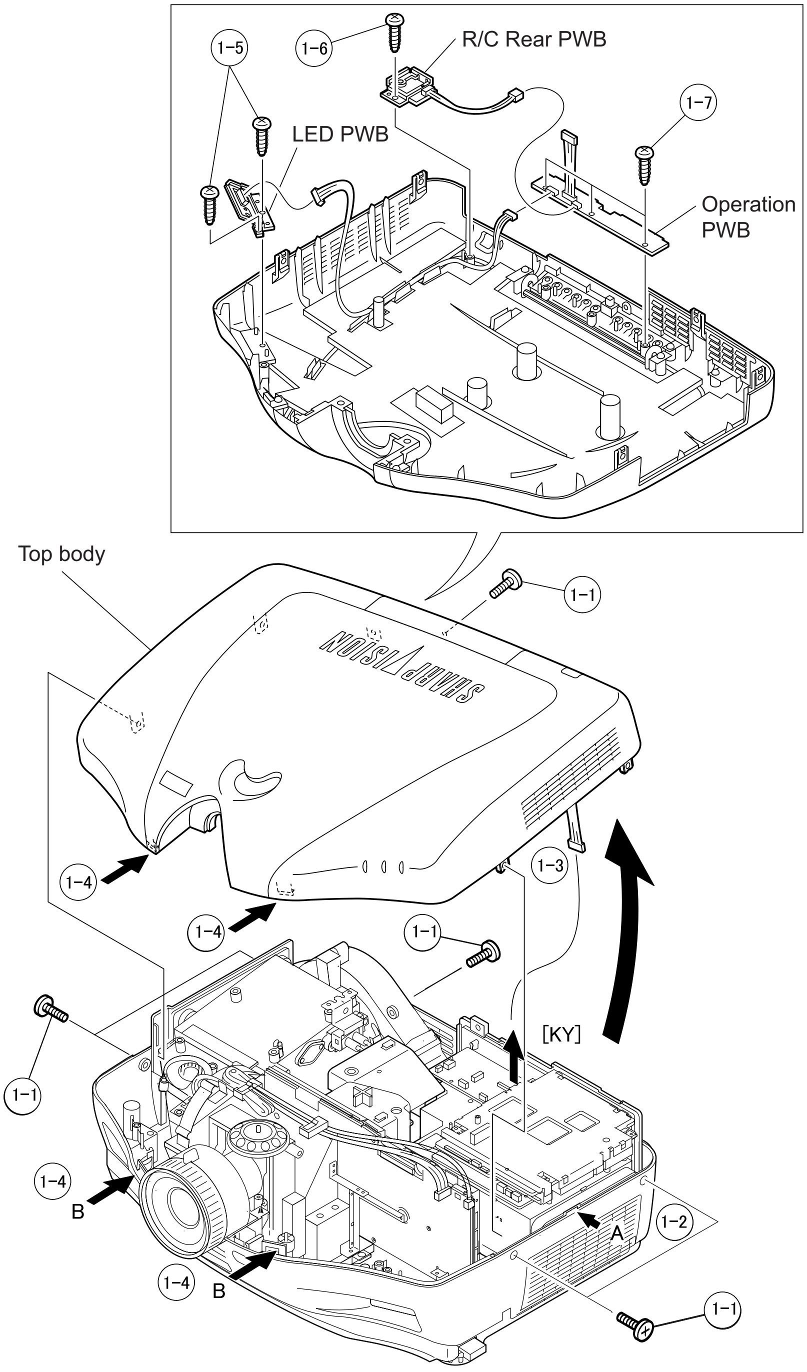
2 Reset the lamp timer.

- While holding down ENTER, ▼ and ▶ on the projector, press ON on the projector.
- “LAMP 0000H” is displayed, indicating that the lamp timer is reset.

CHAPTER 2. REMOVING OF MAJOR PARTS

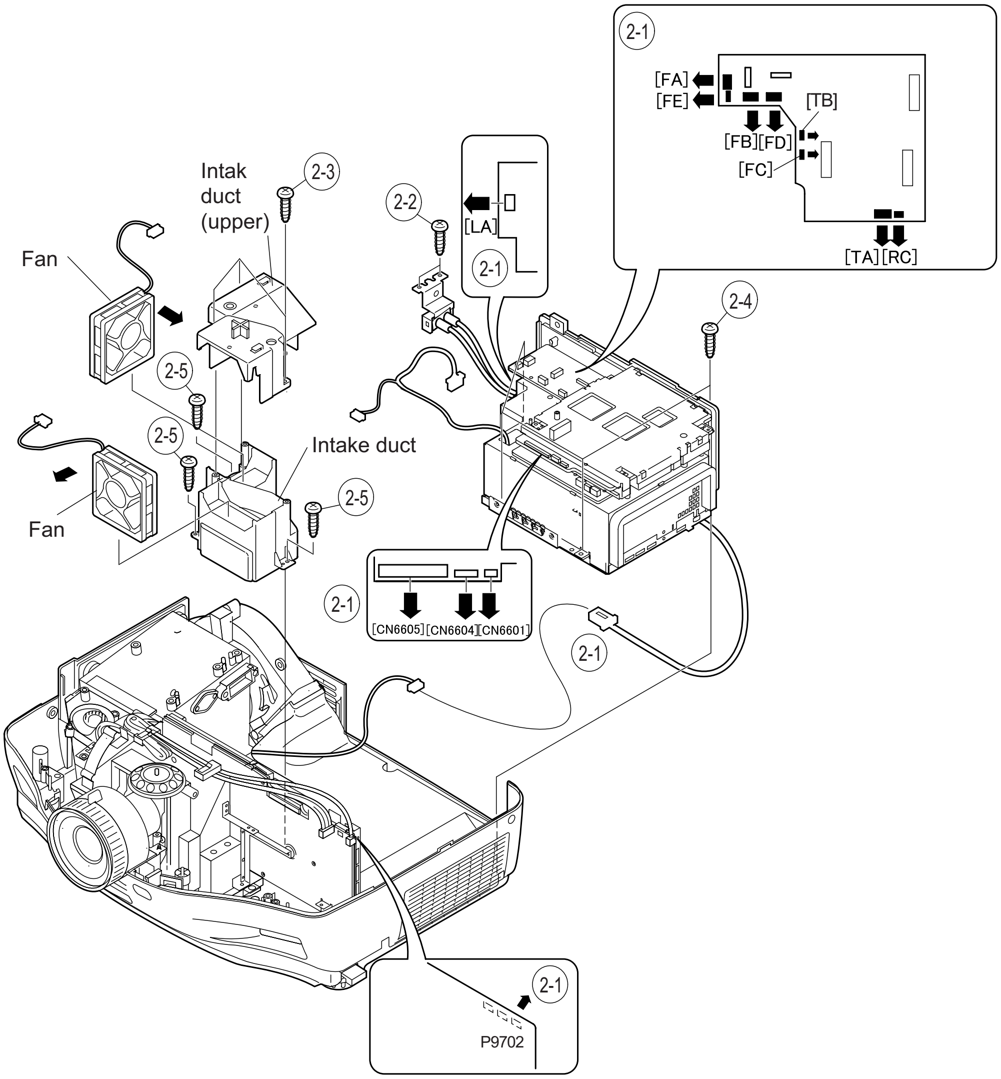
[1] Removing the Top body

1. Remove the six lock screws.
2. Press on side Arrow A of the Bottom body and lift the Rear of the Top body.
3. Dissconnect the connector.
4. Press on front Arrow B of the Bottom body and unhook the claws, and detach the Top body.
5. Remove the 2 screws and detach the LED PWB.
6. Remove the one screw and detach the R/C Rear PWB.
7. remove the three screws and detach the Operation PWB.


1-5
1-6
R/C Rear PWB
1-7
LED PWB
Operation PWB
Top body
1-1
1-4
1-3
1-4
1-1
1-1
[KY]
1-4
B
A
1-2
1-4
B
1-1

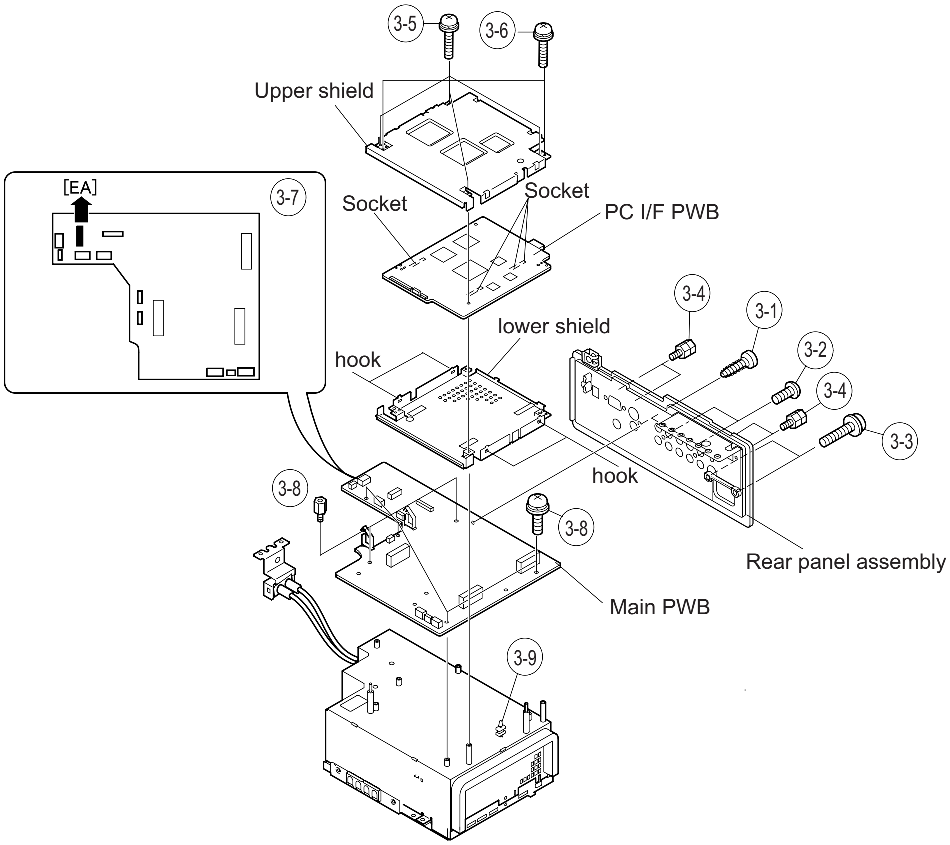
[2] Removing the Fans and PWB Unit Assembly

1. Dissconnect the fourteen connectors.
2. Remove the two screws and detach the Lamp socket.
3. Remove the three screws and detach the Intake duct (upper). Detach the two Fans.
4. Remove the four screws and detach the PWB Unit Assembly.
5. Remove the three screws and detach the Intake duct (lower).


2-1
[FA]
[FE]
[TB]
[FB][FD]
[FC]
[TA][RC]
Intak
duct
(upper)
2-3
2-2
[LA]
2-1
Fan
2-4
2-5
2-5
Intake duct
2-5
Fan
2-1
[CN6605][CN6604][CN6601]
2-1
2-1
P9702

[3] Removing the Rear panel assembly, PC I/F PWB and the Main PWB

1. Remove the three screw.
2. Remove the two screws.
3. Remove the two screws.
4. Remove the four hexagonal supports and detach the Rear panel assembly.
5. Remove the four screws and detach the PC I/F assembly.
6. Remove the two screws and remove the four socket, and detach the shields.
7. Remove the one connector.
8. Remove the three screws and remove the two hexagonal supports.
9. Remove the one hook and detach the Main PWB.


3-5
3-6
Upper shield
[EA]
3-7
Socket
Socket
PC I/F PWB
3-4
3-1
lower shield
3-2
hook
3-4
3-3
hook
3-8
3-8
Rear panel assembly
Main PWB
3-9

[4] Precaution on Mounting the PC I/F PWB

1. Insert the lower shield into the power supply unit.
2. Align the PC I/F PWB with the socket on the main PWB, and securely connect them by pressing the 3 socket sections from above.
3. Fit the upper shield to the lower shield.

NOTE: (1) You must pay attention to the fitting direction of the upper and lower shields (both sides). (Figures 1 and 2)

(2) The upper shield on the terminal side must not be placed on the PWB. (Figure 3)

4. Install the 2 screws (3-6).
5. Install the 4 screws (3-5).

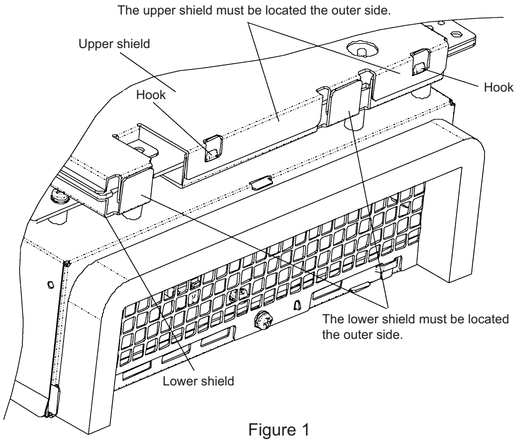

The upper shield must be located the outer side.
Upper shield
Hook
Hook
The lower shield must be located the outer side.
Lower shield

Figure 1

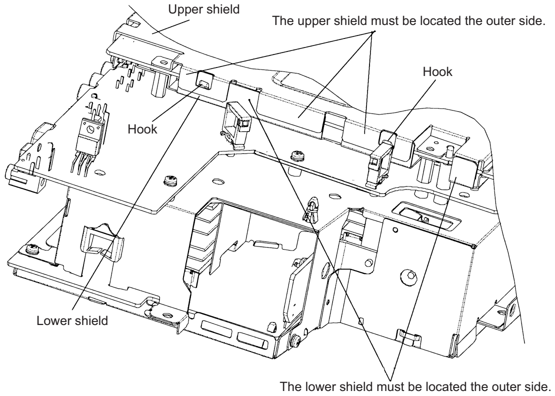

Upper shield
The upper shield must be located the outer side.
Hook
Hook
Lower shield
The lower shield must be located the outer side.

Figure 2

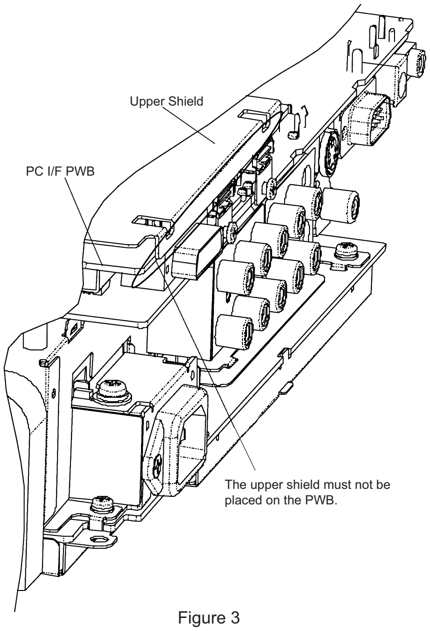
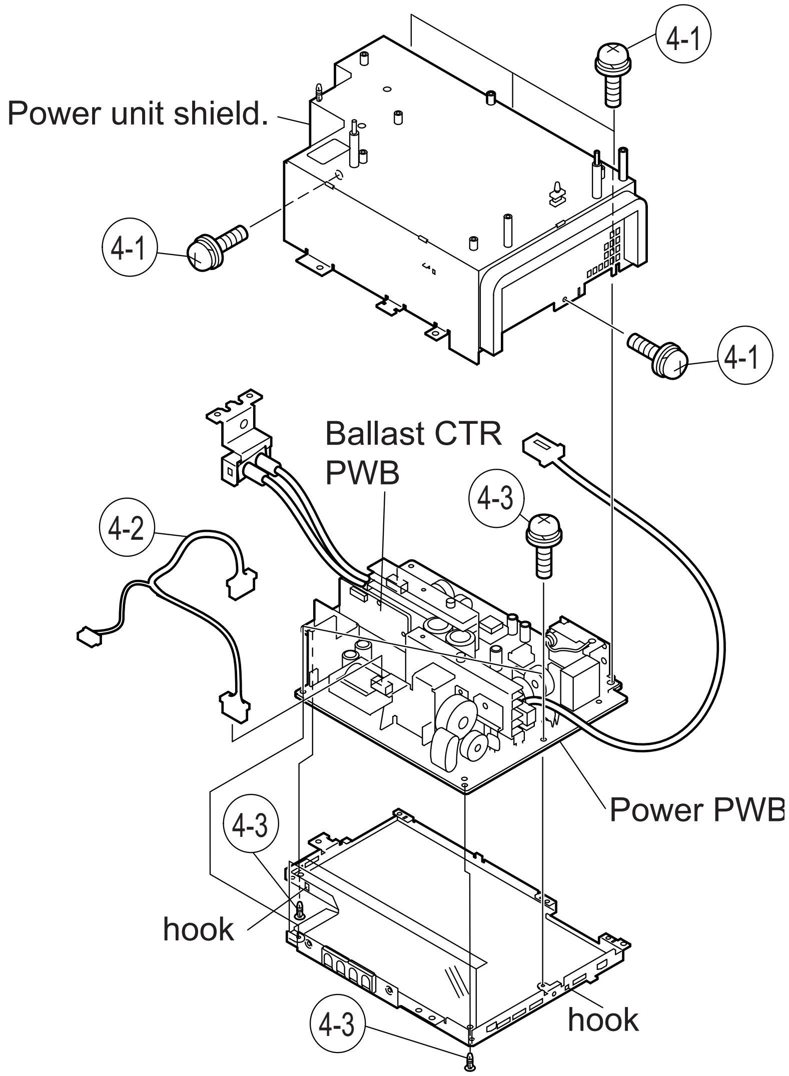

Upper Shield
PC I/F PWB
The upper shield must not be placed on the PWB.

Figure 3

[5] Removing the Power unit shield assembly and Power/Ballast assembly

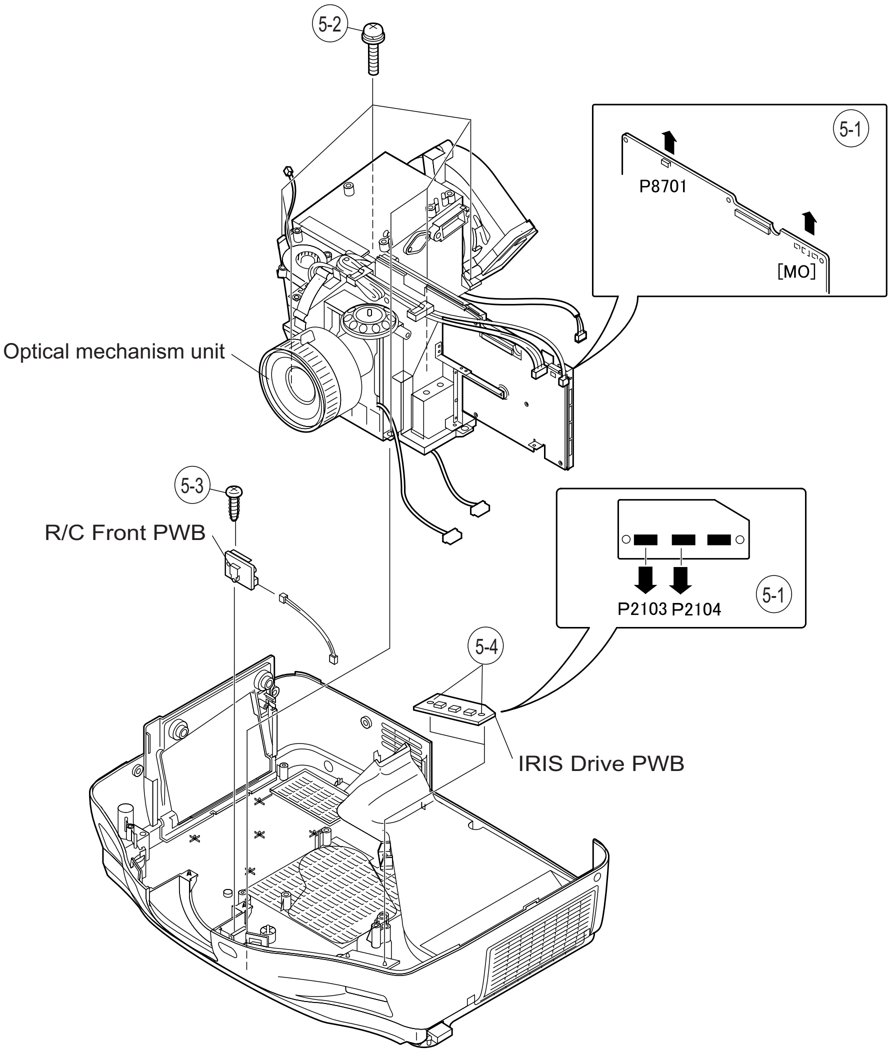
1. Remove the five screws and remove the two hooks, and detach the Power unit shield assembly.
2. Remove the one connector.
3. Remove the two screws and remove the two hooks, and detach the Power/Ballast assembly.

NOTE: Order the Power/Ballast assembly when replacing the ballast unit.


4-1
Power unit shield.
4-1
4-1
Ballast CTR PWB
4-3
4-2
Power PWB
4-3
hook
hook
4-3

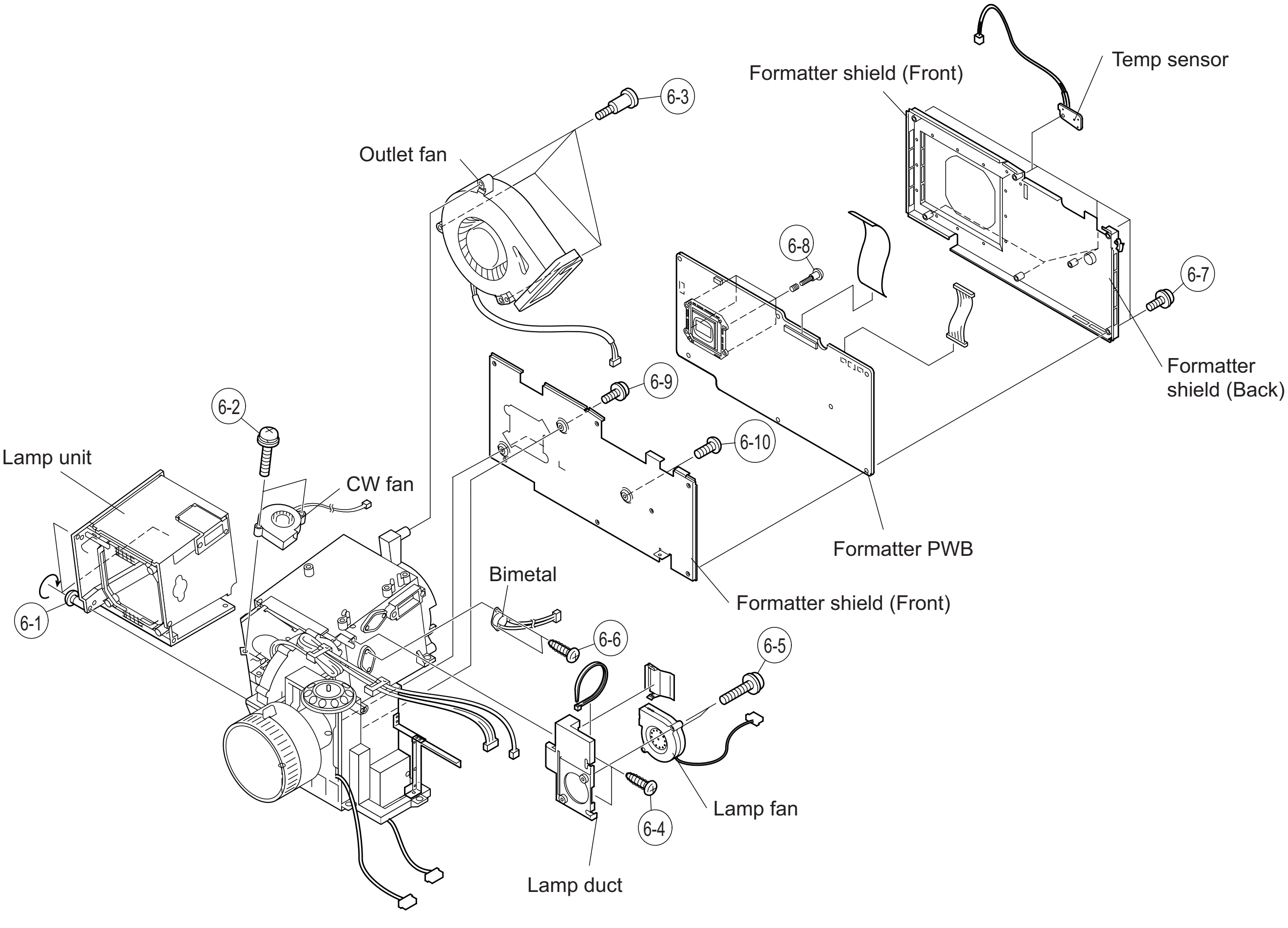
[6] Removing the Optical mechanism unit, R/C Front PWB and IRIS Drive PWB

1. Remove the four connectors.
2. Remove the six screws and detach the Optical mechanism unit.
3. Remove the one screw and the one connector. Detach the R/C Front PWB.
4. Remove the two hooks and detach the IRIS Drtive PWB.


5-2
5-1
P8701
[MO]
Optical mechanism unit
5-3
R/C Front PWB
P2103 P2104
5-1
5-4
IRIS Drive PWB

[7] Removing the Lamp unit, CW fan, Outlet Fan, Lamp duct, Lamp fan, Bimetal, Temp sensor and Formatter unit.

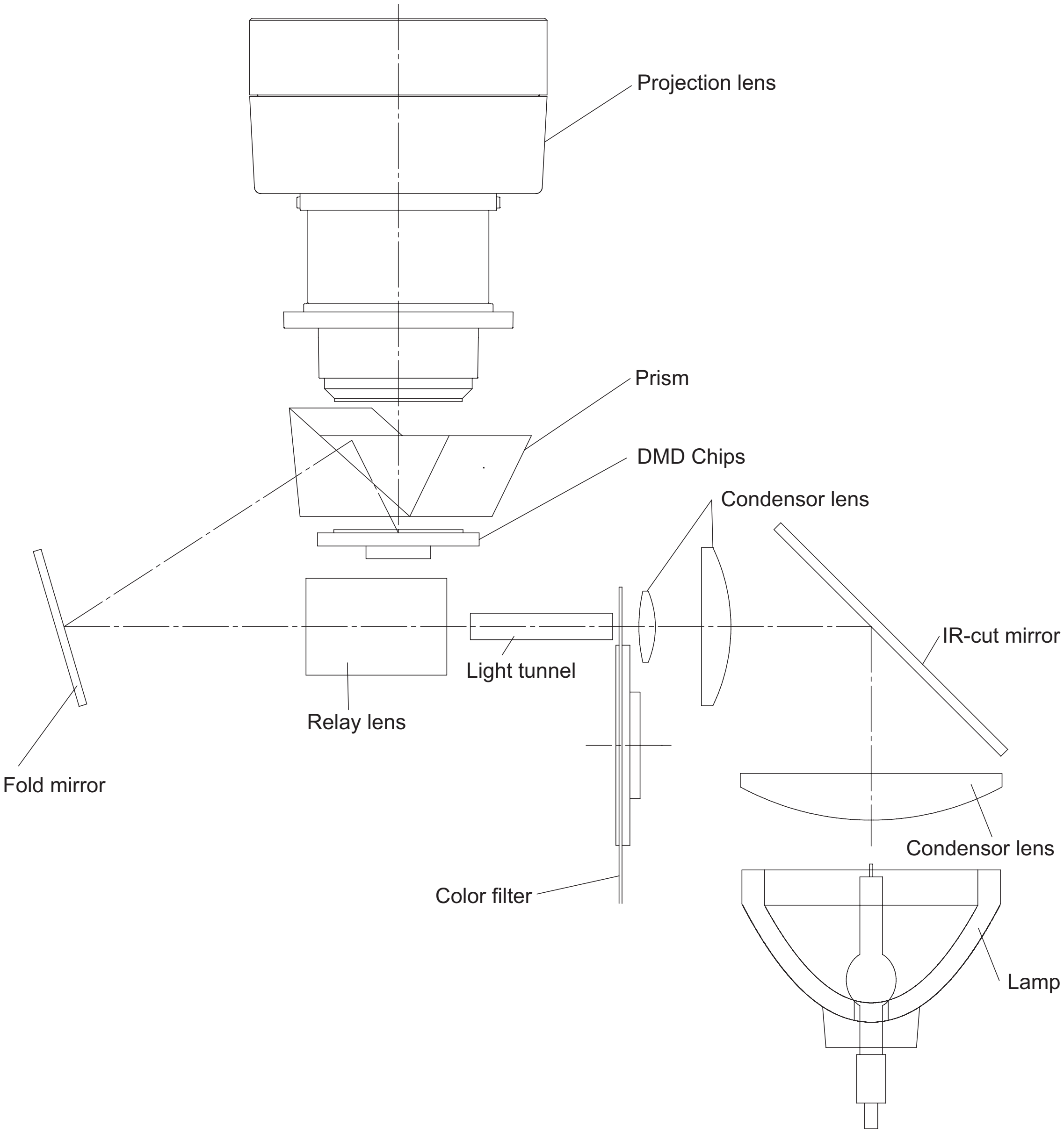
1. Remove the three screws and detach the Lamp unit.
2. Remove the two screws and detach the CW fan.
3. Remove the three screws and detach the Outlet fan.
4. Remove the two screws and detach the Lamp duct.
5. Remove the two screws and detach the Lamp fan.
6. Remove the two screws and detach the Bimetal.
7. Remove the seven screws and detach the Temp sensor and Formatter shield (Back).
8. Remove the four screws and detach the Formatter PWB.
9. Remove the two screws.
10. Remove the one screw and detach the Formatter shield (Front)


Temp sensor
Formatter shield (Front)
6-3
Outlet fan
6-8
6-7
Formatter shield (Back)
6-9
6-2
6-10
Lamp unit
CW fan
Formatter PWB
Bimetal
Formatter shield (Front)
6-1
6-6
6-5
Lamp fan
6-4
Lamp duct

CHAPTER 3. THE OPTICAL UNIT OUTLINE

[1] THE OPTICAL UNIT OUTLINE

1. Layout for proper setup of the optical components and parts (top view)

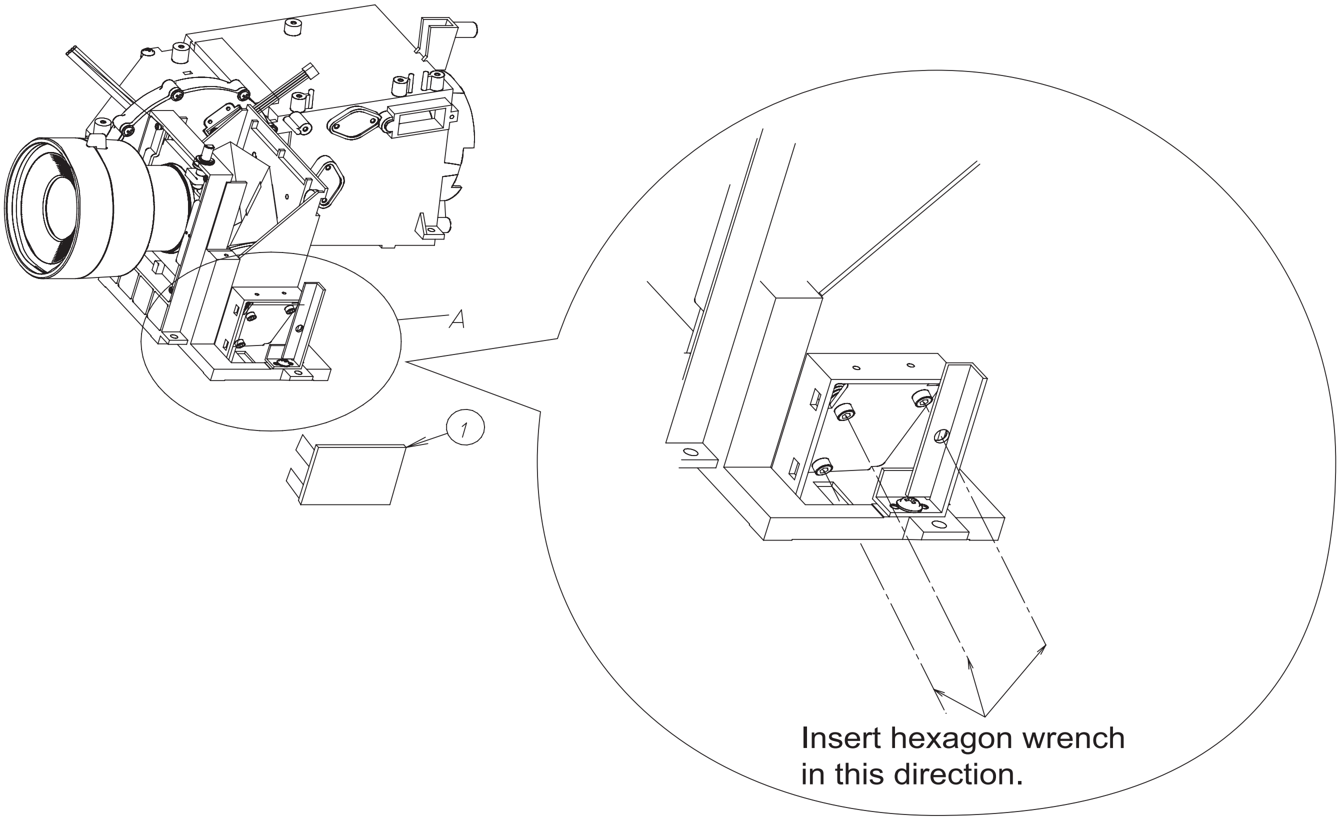

Projection lens
Prism
DMD Chips
Condensor lens
IR-cut mirror
Light tunnel
Relay lens
Fold mirror
Condensor lens
Color filter
Lamp

Item	Descriptions
1. Lamp	The DC Light source lamp with parabola reflector.
2. Condensor lens, IR-cut mirror and light- tunnel	The condensor lens leads the light generated from the lamp to the end surface of the light-tunnel through the IR-cut mirror. The IR-cut mirror is set in this unit to eliminate the excessive heat by the lamp energy.
3. Color filter	This color filter separates the white light into the 3 colors R,G and B. A photo-sensor should be set in this unit to detect the transition timing properly between color filters. The maximum rotating speed is 9000rpm.
4. Relay lens and fold mirror	This unit leads the illumination spot to effective area on DMD.
5. Prism	This prism also leads the illumination spot to effective area on DMD and at the same time leads the reflection lights on the DMD to the projection lens.
6. DMD chip	This chip turns on and off in projection to each color component per dot depending on the input source.
7. Projection lens	This lens enlarges and projects the incidend light coming from the DMD.

2. Adjusting the mirrors

Make adjustment by the indication territory on the screen to prevent the circumference of the screen from getting dark because a lighting range deviated.

1. Remove the top body so that the optical unit may be seen. Display white only screen on the screen.
2. Detach the mirror adjustment part cover ① on the bottom right of the projection lens.
3. Turn three screws with special hexagon wrench (9HPH10XL120) and adjust so that a part of the screen may not get dark because a lighting range deviated
4. Mount the adjustment part cover ①.
5. Mount the top panel.



Expansion figure of part A

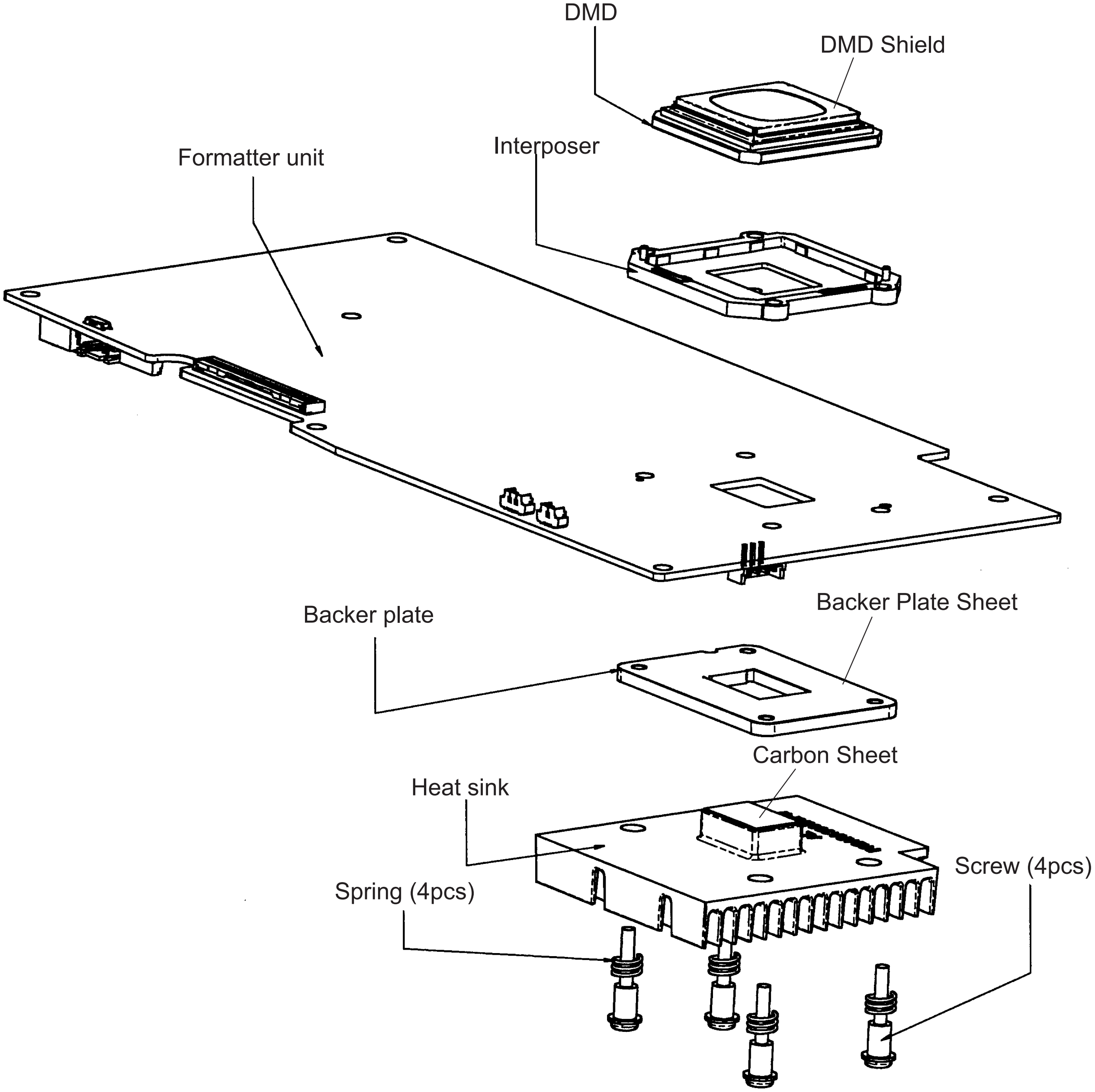
3. Adjusting the back focal distance after replacing the projection lens

NOTE: A piece of temporary tape is attached on the focus ring that comes with the replacement projection lens. Keep this tape in place until the finish of the adjustment.

1. Provide a distance of 2.4 m between the set and the screen and adjust the zoom knob to “wide end”.
2. Adjust the lens shift until the projection lens comes to the same level as the center of the screen.
3. Detach the optical unit top cover A from behind the projection lens.
4. Loosen the four hex screws B in the back of the projection lens.
5. Insert the adjustment screwdriver C (9EVDRIVERZ9000) in the hole D at the back of the lens. Put the center of the screen in the best focus. (Preferably feed the signal for 1-dot white crosshatch pattern or 1-dot white dot pattern on black background.)
6. Tighten the four hex screws B to the torque of 0.3 Nm (3.06 kgfcm), and apply screw loctite to them.
7. Peel the temporary tape off the focus ring of the projection lens.
8. Attach the optical unit top cover A back into position. Finally fix the two screws E and apply screw loctite to them.

4. Joint of DMD and the unit

Wipe to clean the contamination of the PWB contacting part (gold plating part) with ethanol.
Set the position of the interposer with DMD attached to the optical unit, and then put the unit PWB on the interposer.
Sandwich the unit PWB and the back plate with the heatsink from the reverse side of the unit PWB and tighten with screws and springs.
The tightening toruqus is 0.45±0.05 Nm (4.5Kgfcm)

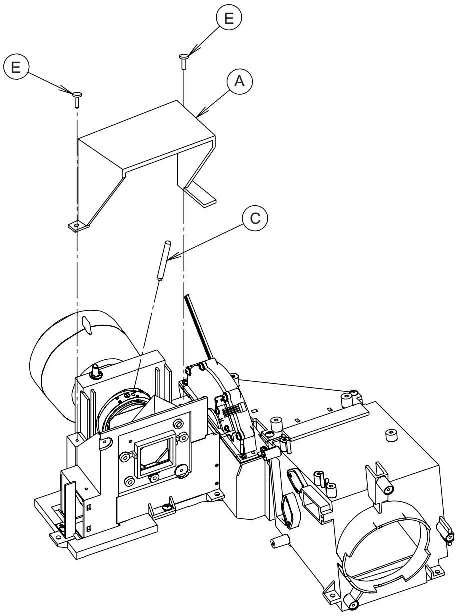

DMD
DMD Shield
Interposer
Formatter unit
Backer plate
Backer Plate Sheet
Carbon Sheet
Heat sink
Spring (4pcs)
Screw (4pcs)

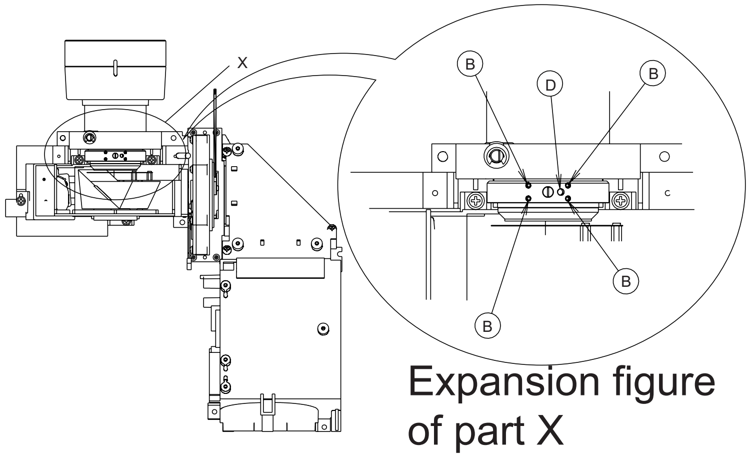
5. When the DMD unit has been replaced

NOTE: DMD chip and Formatter PWB are supplied at the same time, and an exchange only with DMD isn't done.Refer to "REMOVING OF MAJOR PARTS" when exchanging Formatter PWB.

There is no need to readjust the back focal distance of the projection lens. If focusing is noticeably poor, however, make this readjustment.

1. Provide a distance of 2.4 m between the set and the screen.
2. Adjust the lens shift until the projection lens comes to the same level as the center of the screen.
3. Detach the optical unit top cover A from behind the projection lens.
4. Loosen the four hex screws B in the back of the projection lens.
5. Adjust the zoom knob at the front of the projection lens to "tele end" and ensure good focusing.
6. Then adjust the zoom knob at the front of the projection lens to "wide end".
7. Insert the adjustment screwdriver C (9EVDRIVERZ9000) in the hole D at the back of the lens. Put the center of the screen in the best focus. (Preferably feed the signal for 1-dot white crosshatch pattern or 1-dot white dot pattern on black background.)
8. Move the zoom knob from "wide end" back to "tele end" and see if focusing is ensured. If not, repeat the above steps (5), (6) and (7) until the best focus is achieved.
9. Tighten the four hex screws B to the torque of 0.3 Nm (3.06 kgfcm), and apply screw loctite to them.
10. Attach the optical unit top cover A back into position. Finally fix the two screws E and apply screw loctite to them.





CHAPTER 4. ELECTRICAL ADJUSTMENT

[1] ELECTRICAL ADJUSTMENT

The unit has been adjusted optimally at the time of factory shipment. However, if the screen position is deviated or when exchanging parts, make an adjustment as shown below.

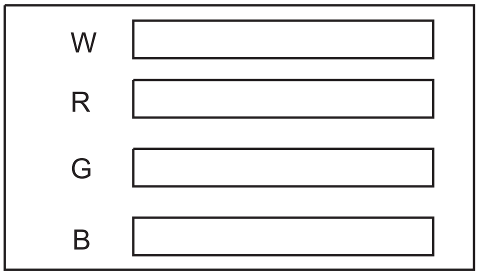
- Turn on the power (lamp on state) and wait for 15 minutes for aging.
- Enter the adjustment process mode with SW2002 (tact switch) on the main unit.
- Select the group to adjust with the DOWN (▼) key or the UP (▲) key on the remote control, and enter the adjustment item with the ENTER (↵) key on the remote control.
- Select the adjustment item with the DOWN (▼) key or the UP (▲) key on the remote control.
- Use the LEFT (◄) key or the RIGHT (►) key for adjustment.
- To return from the adjustment item to the adjustment group, use the UNDO (↰) key.
- To exit the adjustment process mode, execute the factory setting at the end of the adjustment.
  If the factory setting is not executed, the adjusted contents are not reflected.

<Cautions for adjustment>

1. Initialization and factory setting

   If the initialization S1 or the factory setting S5 of EEPROM is carried out, time for writing the data is necessary.

   When executing EEPROM initialization S1 or S5, the OSD of adjustment process mode disappears, and the OSD of SET1 or SET5 appears. After completing setting, the input is switched automatically (SET1: DVI A-RGB input, SET5: C1). Never turn off the power until the input is switched (a little less than 1 minute).

No.	Adjusting point	Adjusting conditions	Adjusting procedure
1	EEPROM initialization	1. Turn on the power (with the lamp on) and warm up the set for 15 minutes.	1. Make the following settings. Press SW2002 to enter the process mode, and execute S1 to initialize EEPROM. After executing S1, the input switches to DVI-AnalogRGB. S1: Main and Sub EEPROM initialization S2: Sub EEPROM initialization
2	MODEL setting and model name check	Process menu: LINE Select MODEL.	MODEL 0 DT5000 1 XVZ20000 2 XVZ21000 After setting, check that the model name displayed in the first line of process menu is the same as the setting.
3	Color wheel sequence setting	Check the number marked at CW. Adjustment group: DLP Adjustment item: SEQUENCE Initial value: 2	Color wheel number: SEQUENCE number ① 1 ② 2 ③ 3
4	Color wheel index adjustment	1. Adjustment device: DDP3021 2. Adjustment group: DLP 3. Adjustment item: CWINDEX Initial value: 40 The built-in pattern for INDEX adjustment is displayed.	1. Adjust the setting so that the R, G and B Ramp tone pattern should be smooth without noises. 

No.	Adjusting point	Adjusting conditions	Adjusting procedure
5-1	R-bright/contrast adjustment	1. Device: AD998417 2. Adjustment group: AD (RGB) (Process gamma linkage) 3. Adjustment item: R-Bright Initial value: 40 Adjustment item: R-D Initial value: 60 4. Input terminal: DVI A-RGB (Input switching linkage) 5. Input signal: XGA Wind pattern having 100% (0.7 Vpp) R signal and 0%	1. Observe the 0% portion. 2. Vary R-Bright (increment direction), and adjust to the point reduced by 1 point from the point where red bit dropout appears. 3. Observe the 100% portion. 4. Vary R-D (increment direction), and adjust to the point raised by 2 points from the point where red bit dropout appears.
5-2	G-bright/contrast adjustment	1. Device: AD998417 2. Adjustment group: AD (RGB) (Process gamma linkage) 3. Adjustment item: G-Bright Initial value: 40 Adjustment item: G-D Initial value: 60 4. Input terminal: DVI A-RGB (Input switching linkage) 5. Input signal: XGA Wind pattern having 100% (0.7 Vpp) G signal and 0%	1. Observe the 0% portion. 2. Vary G-Bright (increment direction), and adjust to the point reduced by 1 point from the point where green bit dropout appears. 3. Observe the 100% portion. 4. Vary G-D (increment direction), and adjust to the point raised by 2 points from the point where green bit dropout appears.
5-3	B-bright/contrast adjustment	1. Device: AD998417 2. Adjustment group: AD (RGB) (Process gamma linkage) 3. Adjustment item: B-Bright Initial value: 40 Adjustment item: B-D Initial value: 60 4. Input terminal: DVI A-RGB (Input switching linkage) 5. Input signal: XGA Wind pattern having 100% (0.7 Vpp) B signal and 0%	1. Observe the 0% portion. 2. Vary B-Bright (increment direction), and adjust to the point reduced by 1 point from the point where blue bit dropout appears. 3. Observe the 100% portion. 4. Vary B-D (increment direction), and adjust to the point raised by 2 points from the point where blue bit dropout appears.
6-1	Component R-offset	1. Adjustment device: AD998417 2. Adjustment group: AD (COMP) (Process gamma linkage) 3. Adjustment item: CR-OFFSET Initial value: 50 4. Input terminal: DVI A-Component (Input switching linkage) 5. Input signal: Component 100% Ramp signal	1. Vary CR-OFFSET, and place the red line appearing near the center over the green line. 2. The line color turns yellow.
6-2	Component B-offset (Auto adjustment)	1. Adjustment device: AD998417 2. Adjustment group: AD (COMP) (Process gamma linkage) 3. Adjustment item: CB-OFFSET Initial value: 50 4. Input terminal: DVI A-Component (Input switching linkage) 5. Input signal: Component 100% Ramp signal	1. Vary CB-OFFSET, and place the blue line over the line turning yellow by CR-OFFSET adjustment. 2. The line color turns white.
6-3	Component G-bright	1. Adjustment device: AD998417 2. Adjustment group: AD (COMP) (Process gamma linkage) 3. Adjustment item: G-BRIGHT Initial value: 70 4. Input terminal: DVI A-Component (Input switching linkage) 5. Component wind pattern having 100% (0.7 Vpp) G signal and 0% 6. Perform adjustment after adjusting CR-OFFSET and CB-OFFSET.	1. Observe the 0% portion. 2. Vary G-BRIGHT (decrement direction), and the screen starts to whiten. 3. Adjust to the point where no bit dropout is found and the screen becomes completely white.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
6-4	Component RGB-gain adjustment (Auto adjustment)	1. Adjustment device: AD998417 2. Adjustment group: AD (COMP) (Process gamma linkage) 3. Adjustment item: G-D Initial value: 70 4. Input terminal: DVI A-Component (Input switching linkage) 5. Component wind pattern having 100% (0.7 Vpp) G signal and 0% 6. Perform adjustment after adjusting CR-OFFSET, CB-OFFSET and G-BRIGHT.	1. Observe the 100% portion. 2. Vary G-GAIN (decrement direction), and the illuminance and chromaticity start to change. 3. Adjust to the point raised by 2 points from the point where bit dropout appears on the screen.
7	White balance adjustment	1. Adjustment device: DDP3021 2. Adjustment group: DLP 3. Adjustment item: R-GAIN Initial value: 95 B-GAIN Initial value: 95 4. Input terminal: DVI A-Component (Input switching linkage) 5. Input signal: Component 75% gray signal	1. Observe the chromaticity of 75% portion using CL200. 2. Adjust the y value to adjustment chromaticity ± 0.005 with B-GAIN. 3. Adjust the x value to adjustment chromaticity ± 0.005 with R-GAIN. Adjustment chromaticity x = 0.299 ±0.005 y = 0.316 ±0.005
8	Factory setting	1. Group: SSS	1. Perform the following settings. Destination Process adjustment Remote control setting Europe: S3 Factory setting 3 North America: S4 Factory setting 4 Japan: S5 Factory setting 5 China: S6 Factory setting 6 South America: S7 Factory setting 7

Do not change the process adjustment values other than the above since they are set so that optimal images are obtained.

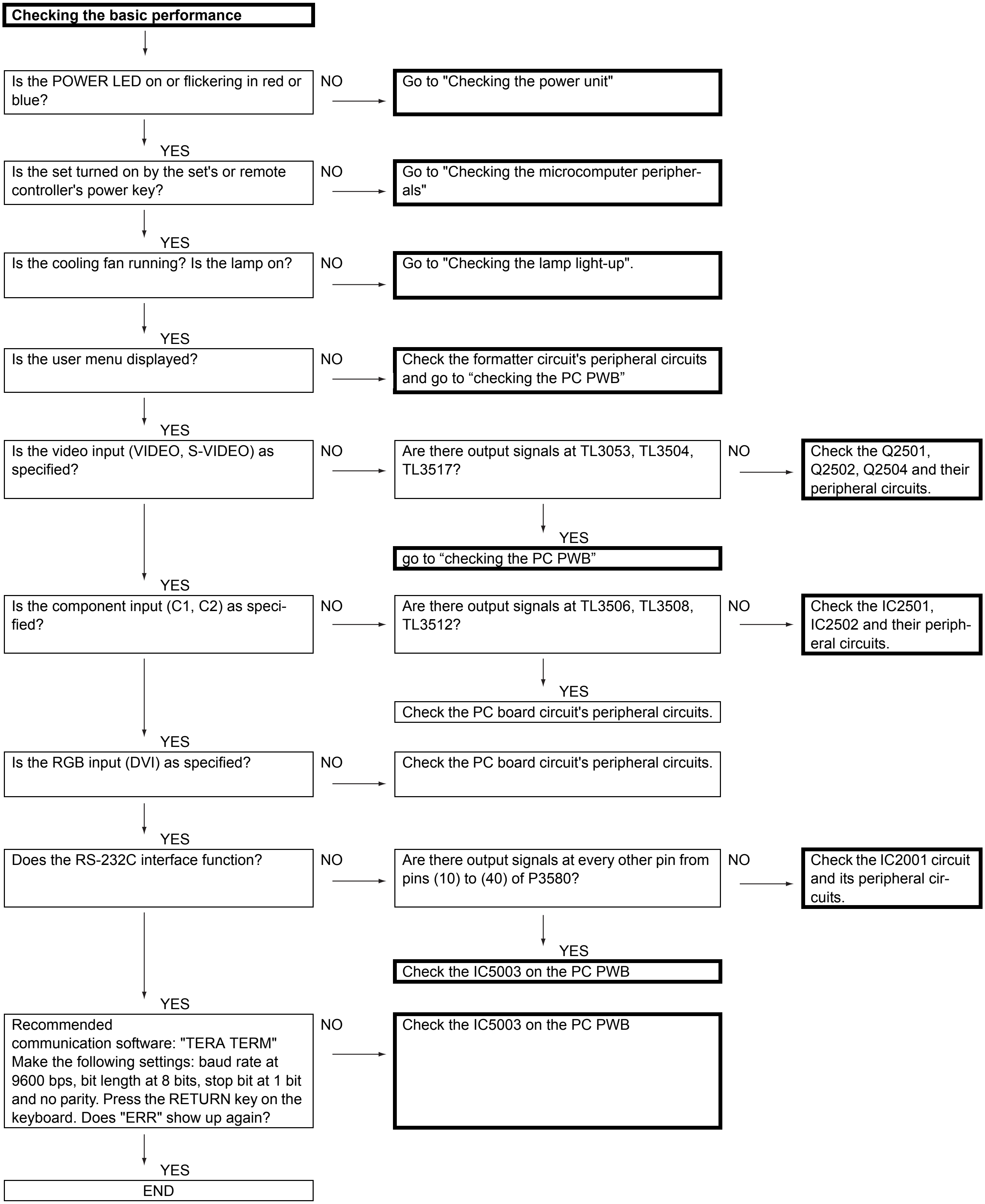
[2] Process menu

Group	Subject		
AD(RGB)	R-BRIGHT	Adjustment Value	Subject
	G-BRIGHT	Adjustment Value	Subject
	B-BRIGHT	Adjustment Value	Subject
	R-D	Adjustment Value	Subject
	G-D	Adjustment Value	Subject
	B-D	Adjustment Value	Subject
	AD-AUTO	—	No Use
AD(COMP)	G-BRIGHT	Adjustment Value	Subject
	CR-OFFSET	Adjustment Value	Subject
	CB-OFFSET	Adjustment Value	Subject
	G-D	Adjustment Value	Subject
	COMP-AUTO	0	Fixed Value
DLP	CW-INDEX	Adjustment Value	Subject
	DLP-GAMMA	1	Fixed Value
	R-BRIGHT	100	Fixed Value
	G-BRIGHT	100	Fixed Value
	B-BRIGHT	100	Fixed Value
	R-GAIN	Adjustment Value	Subject
	G-GAIN	95	Fixed Value
	B-GAIN	Adjustment Value	Subject
	CCA	0	Fixed Value
	SEQUENCE	Adjustment Value	Subject
VIDEO1	PICTURESUB	128	Fixed Value
	PICTURE	136	Fixed Value
	BRIGHT	128	Fixed Value
	TINT	128	Fixed Value
	N-COLOR	128	Fixed Value
	P-COLOR	120	Fixed Value
	SV-COLOF	5	Fixed Value
	YGC-CNT	0	Fixed Value
	SETUP	1	Fixed Value
	CTI	7	Fixed Value
	N358DLY	7	Fixed Value
	PALDLY	7	Fixed Value
	H-CENTER	128	Fixed Value
	VIDEO-AUTO	0	Fixed Value
VIDEO2	YTRAP FILNP	0	Fixed Value
	CTRAP FILNP	0	Fixed Value
	YTRAP FILS	1	Fixed Value
	CTRAP FILS	2	Fixed Value
	YCTRAP FIL	1	Fixed Value
	YCTRAP GAIN	0	Fixed Value
	FCTRAP SYS	1	Fixed Value
	PEAK GAIN	128	Fixed Value
	PEAK FIL	2	Fixed Value
	PEAK CORING	0	Fixed Value
	CR LPF	1	Fixed Value
	CB LPF	1	Fixed Value
OUTPUT	R1-GAIN	128	Fixed Value
	G1-GAIN	128	Fixed Value
	B1-GAIN	128	Fixed Value
	V-R1-GAIN	128	Fixed Value
	V-G1-GAIN	128	Fixed Value
	V-B1-GAIN	128	Fixed Value
	C-R1-GAIN	128	Fixed Value
	C-G1-GAIN	128	Fixed Value
	C-B1-GAIN	128	Fixed Value
LINE	MODEL	Setting Value	Setting Item
	TIME	—	Fixed Value
	LAMP	0	Fixed Value
	OFF	0	Fixed Value
	TEMP OFF	4	Fixed Value
	SENSOR CHECK	—	Fixed Value

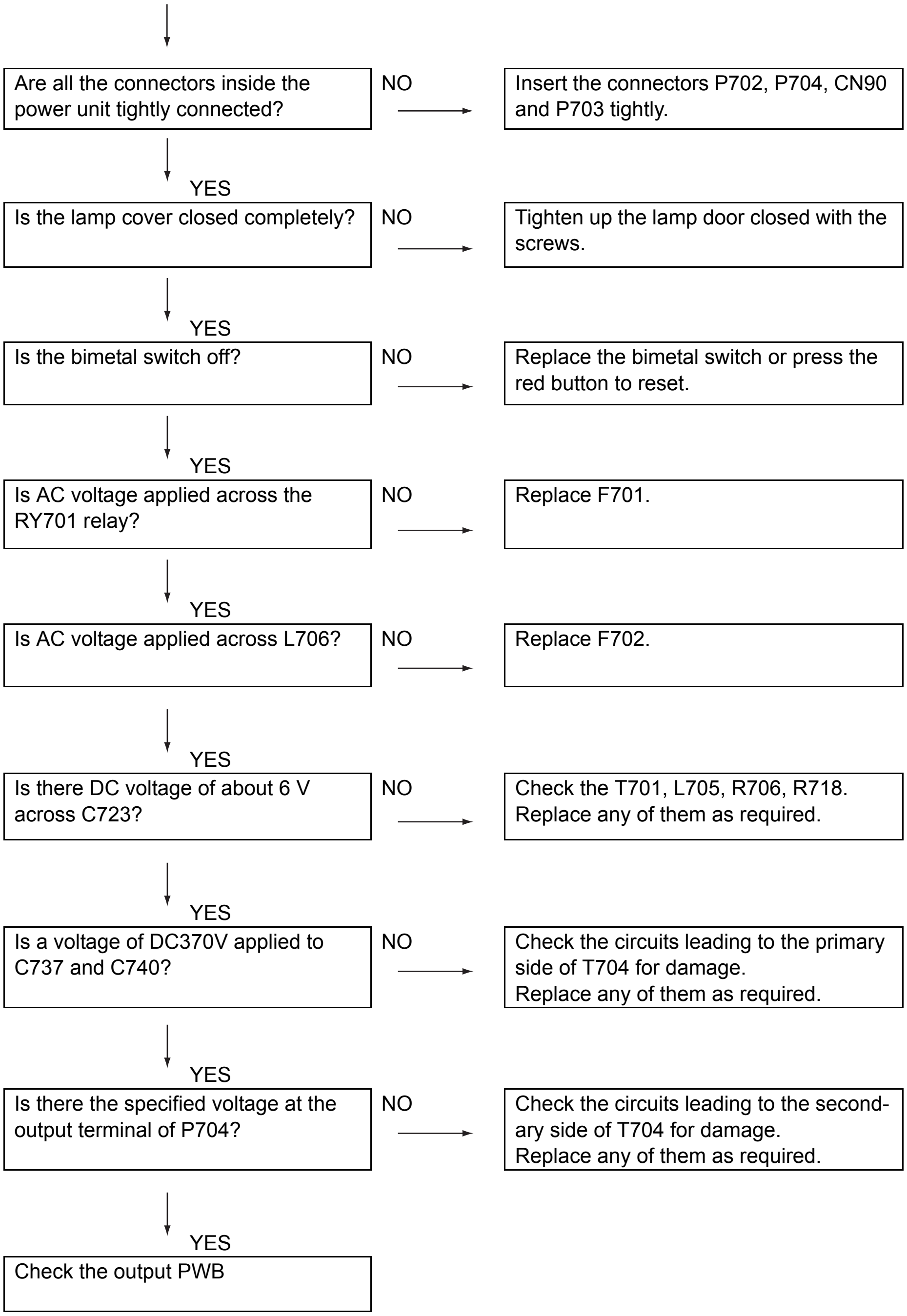
Group	Subject		
SSS	S1 (Main+Sub EEPROM Initialized)	—	
	S2 (Sub EEPROM Initialized)	—	
	S3 (EU)	—	
	S4 (US)	—	
	S5 (JPN)	—	
	S6 (CHINA)	—	
	S7 (South America)	—	
PATTERN	RGB	100% White Signal	
	RGB50	50% Gray Scale Signal	
	CROSS	Crosshatch Signal	
	STEP	Gray Step Signal	
	COLOR	Colour Bar Signal	
	RAMP	Lamp Signal	
	INDEX PATTERN	Index Adjustment Signal	
CVIC	ENHANCED SD	—	Fixed Value
	ENHANCED HD	—	Fixed Value
	DNR	—	Fixed Value
	MNR SD	—	Fixed Value
	MNR HD	—	Fixed Value
	UNVEIL	—	Fixed Value
	ACC	—	Fixed Value
	OSD DIMMER	—	Fixed Value
	CMS HUE	—	Fixed Value
	CMS SAT	—	Fixed Value
	CMS VAL	—	Fixed Value
	GAMMA POS	—	Fixed Value
SPECIAL	IPL	—	
		—	
	E2PROM	—	
	ADR RD/WR	—	
	PRG VER.	—	
		—	
	SUB VER	—	
	FMT VER.	—	

CHAPTER 5. TROUBLE SHOOTING TABLE

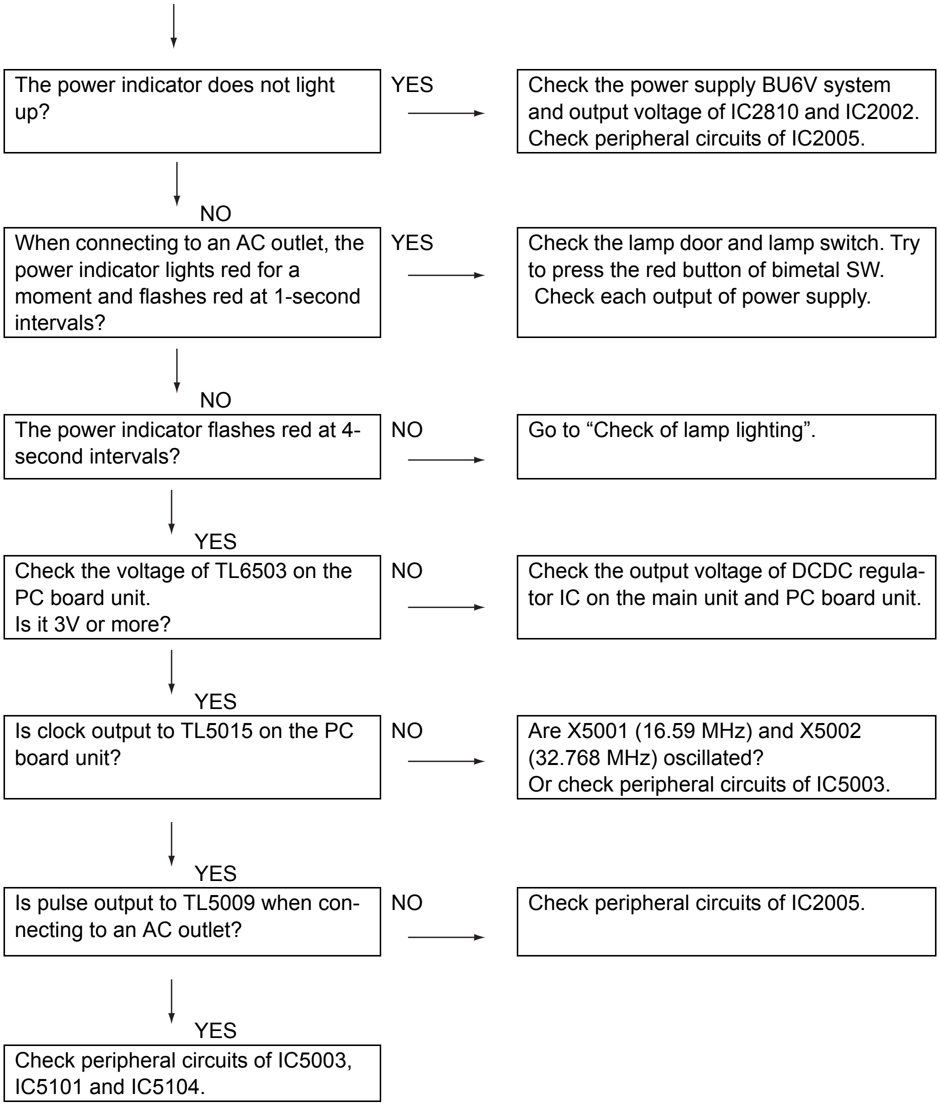
[1] TROUBLE SHOOTING TABLE


Checking the basic performance
Is the POWER LED on or flickering in red or blue?
NO
Go to "Checking the power unit"
YES
Is the set turned on by the set's or remote controller's power key?
NO
Go to "Checking the microcomputer peripherals"
YES
Is the cooling fan running? Is the lamp on?
NO
Go to "Checking the lamp light-up".
YES
Is the user menu displayed?
NO
Check the formatter circuit's peripheral circuits and go to “checking the PC PWB”
YES
Is the video input (VIDEO, S-VIDEO) as specified?
NO
Are there output signals at TL3053, TL3504, TL3517?
NO
Check the Q2501, Q2502, Q2504 and their peripheral circuits.
YES
go to “checking the PC PWB”
YES
Is the component input (C1, C2) as specified?
NO
Are there output signals at TL3506, TL3508, TL3512?
NO
Check the IC2501, IC2502 and their peripheral circuits.
YES
Check the PC board circuit's peripheral circuits.
YES
Is the RGB input (DVI) as specified?
NO
Check the PC board circuit's peripheral circuits.
YES
Does the RS-232C interface function?
NO
Are there output signals at every other pin from pins (10) to (40) of P3580?
NO
Check the IC2001 circuit and its peripheral circuits.
YES
Check the IC5003 on the PC PWB
YES
Recommended communication software: "TERA TERM" Make the following settings: baud rate at 9600 bps, bit length at 8 bits, stop bit at 1 bit and no parity. Press the RETURN key on the keyboard. Does "ERR" show up again?
NO
Check the IC5003 on the PC PWB
YES
END

Checking the power unit


Are all the connectors inside the power unit tightly connected?
NO
Insert the connectors P702, P704, CN90 and P703 tightly.
YES
Is the lamp cover closed completely?
NO
Tighten up the lamp door closed with the screws.
YES
Is the bimetal switch off?
NO
Replace the bimetal switch or press the red button to reset.
YES
Is AC voltage applied across the RY701 relay?
NO
Replace F701.
YES
Is AC voltage applied across L706?
NO
Replace F702.
YES
Is there DC voltage of about 6 V across C723?
NO
Check the T701, L705, R706, R718. Replace any of them as required.
YES
Is a voltage of DC370V applied to C737 and C740?
NO
Check the circuits leading to the primary side of T704 for damage. Replace any of them as required.
YES
Is there the specified voltage at the output terminal of P704?
NO
Check the circuits leading to the secondary side of T704 for damage. Replace any of them as required.
YES
Check the output PWB

Check of the microprocessor's peripheral circuits



The power indicator does not light up?

YES → Check the power supply BU6V system and output voltage of IC2810 and IC2002. Check peripheral circuits of IC2005.

NO ↓

When connecting to an AC outlet, the power indicator lights red for a moment and flashes red at 1-second intervals?

YES → Check the lamp door and lamp switch. Try to press the red button of bimetal SW. Check each output of power supply.

NO ↓

The power indicator flashes red at 4-second intervals?

NO → Go to “Check of lamp lighting”.

YES ↓

Check the voltage of TL6503 on the PC board unit. Is it 3V or more?

NO → Check the output voltage of DCDC regulator IC on the main unit and PC board unit.

YES ↓

Is clock output to TL5015 on the PC board unit?

NO → Are X5001 (16.59 MHz) and X5002 (32.768 MHz) oscillated? Or check peripheral circuits of IC5003.

YES ↓

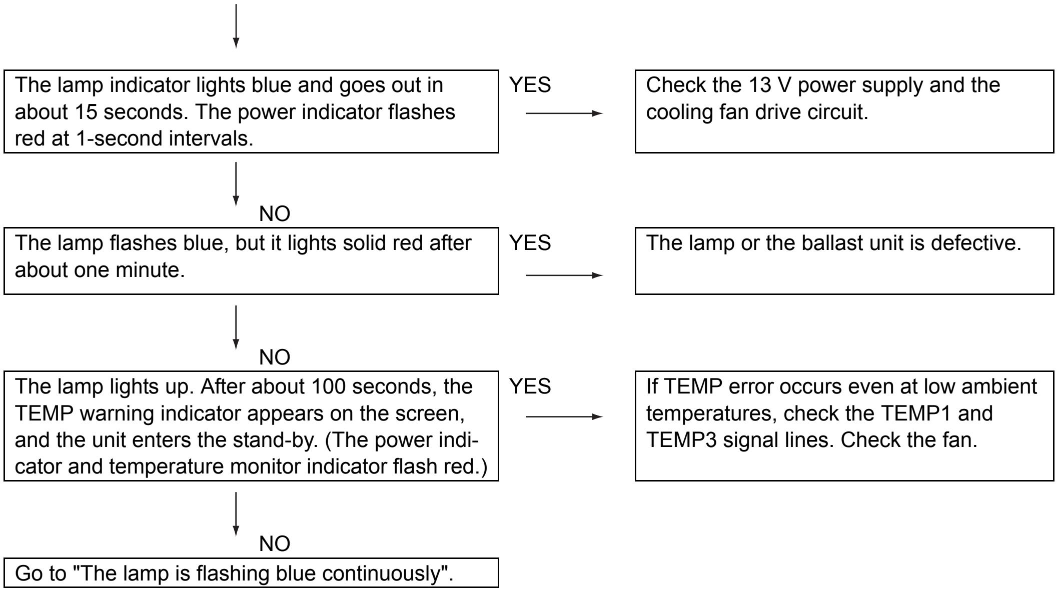
Is pulse output to TL5009 when connecting to an AC outlet?

NO → Check peripheral circuits of IC2005.

YES ↓

Check peripheral circuits of IC5003, IC5101 and IC5104.

Check of lamp lighting



The lamp indicator lights blue and goes out in about 15 seconds. The power indicator flashes red at 1-second intervals.

YES → Check the 13 V power supply and the cooling fan drive circuit.

NO ↓

The lamp flashes blue, but it lights solid red after about one minute.

YES → The lamp or the ballast unit is defective.

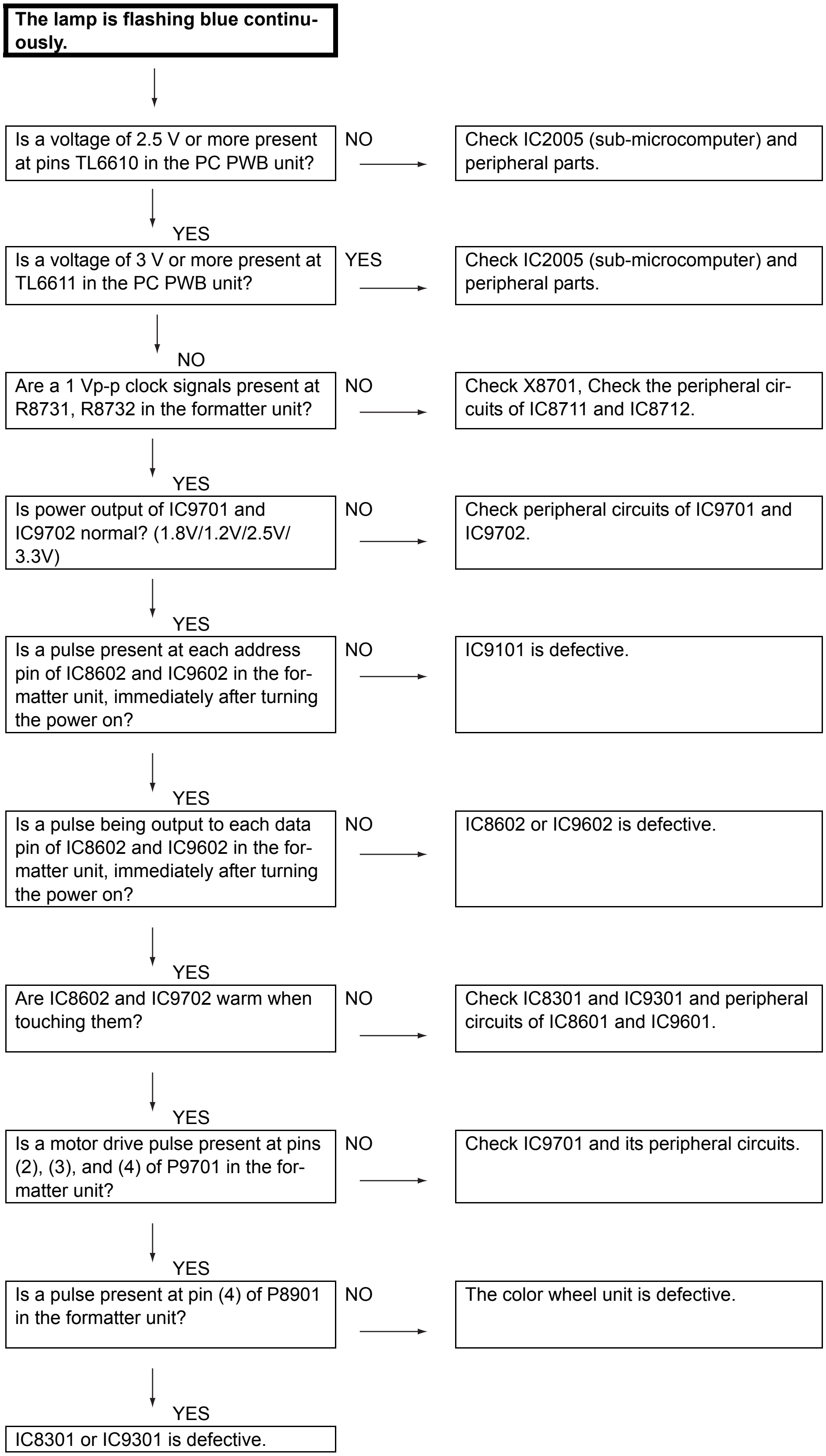
NO ↓

The lamp lights up. After about 100 seconds, the TEMP warning indicator appears on the screen, and the unit enters the stand-by. (The power indicator and temperature monitor indicator flash red.)

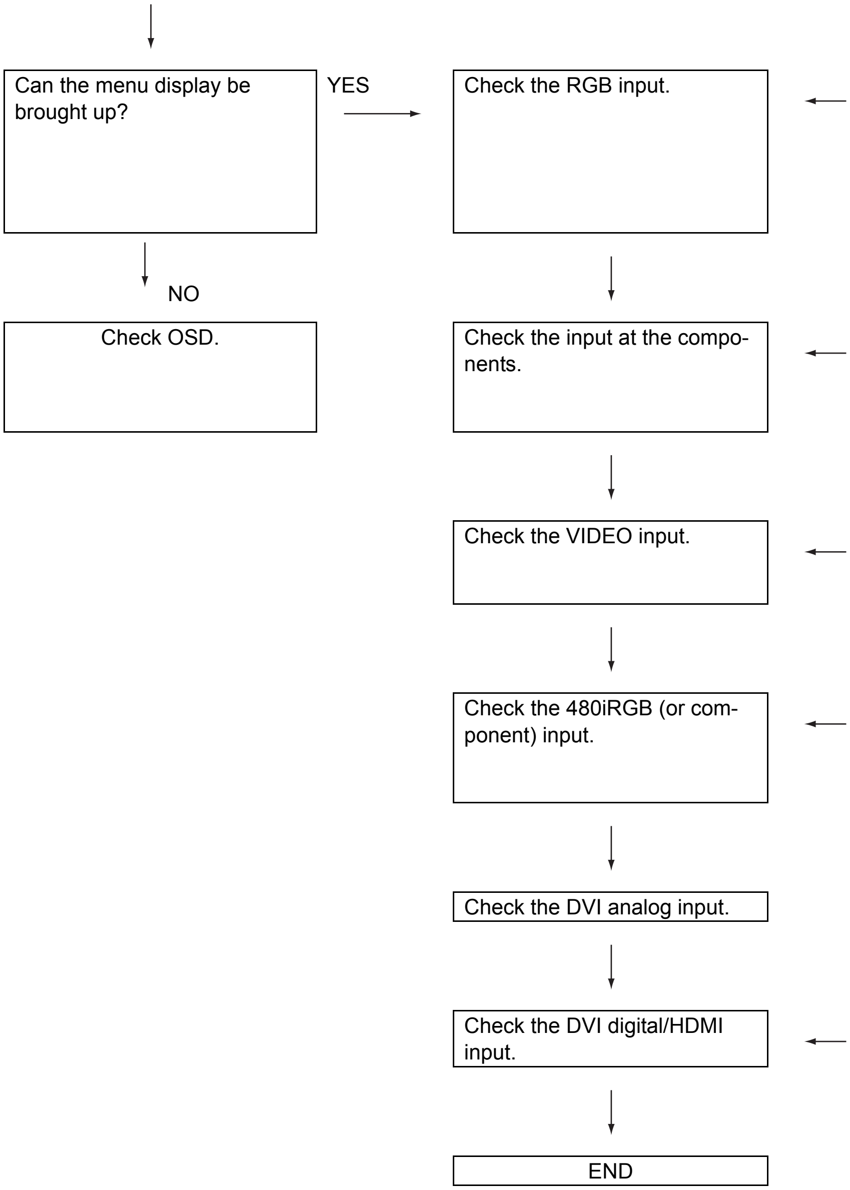
YES → If TEMP error occurs even at low ambient temperatures, check the TEMP1 and TEMP3 signal lines. Check the fan.

NO ↓

Go to "The lamp is flashing blue continuously".


The lamp is flashing blue continuously.
Is a voltage of 2.5 V or more present at pins TL6610 in the PC PWB unit?
NO
Check IC2005 (sub-microcomputer) and peripheral parts.
YES
Is a voltage of 3 V or more present at TL6611 in the PC PWB unit?
YES
Check IC2005 (sub-microcomputer) and peripheral parts.
NO
Are a 1 Vp-p clock signals present at R8731, R8732 in the formatter unit?
NO
Check X8701, Check the peripheral circuits of IC8711 and IC8712.
YES
Is power output of IC9701 and IC9702 normal? (1.8V/1.2V/2.5V/3.3V)
NO
Check peripheral circuits of IC9701 and IC9702.
YES
Is a pulse present at each address pin of IC8602 and IC9602 in the formatter unit, immediately after turning the power on?
NO
IC9101 is defective.
YES
Is a pulse being output to each data pin of IC8602 and IC9602 in the formatter unit, immediately after turning the power on?
NO
IC8602 or IC9602 is defective.
YES
Are IC8602 and IC9702 warm when touching them?
NO
Check IC8301 and IC9301 and peripheral circuits of IC8601 and IC9601.
YES
Is a motor drive pulse present at pins (2), (3), and (4) of P9701 in the formatter unit?
NO
Check IC9701 and its peripheral circuits.
YES
Is a pulse present at pin (4) of P8901 in the formatter unit?
NO
The color wheel unit is defective.
YES
IC8301 or IC9301 is defective.

Check the PC PWB unit.


Can the menu display be brought up?
YES
NO
Check OSD.
Check the RGB input.
Check the input at the components.
Check the VIDEO input.
Check the 480iRGB (or component) input.
Check the DVI analog input.
Check the DVI digital/HDMI input.
END

Check the basic flow of the signals.
Since the component and VIDEO signals follow the same path to the output as the formatter unit uses, after CVIC (IC6001), the check that would otherwise be performed after the CVIC does not need to be performed. (480i and 576i are excluded.)

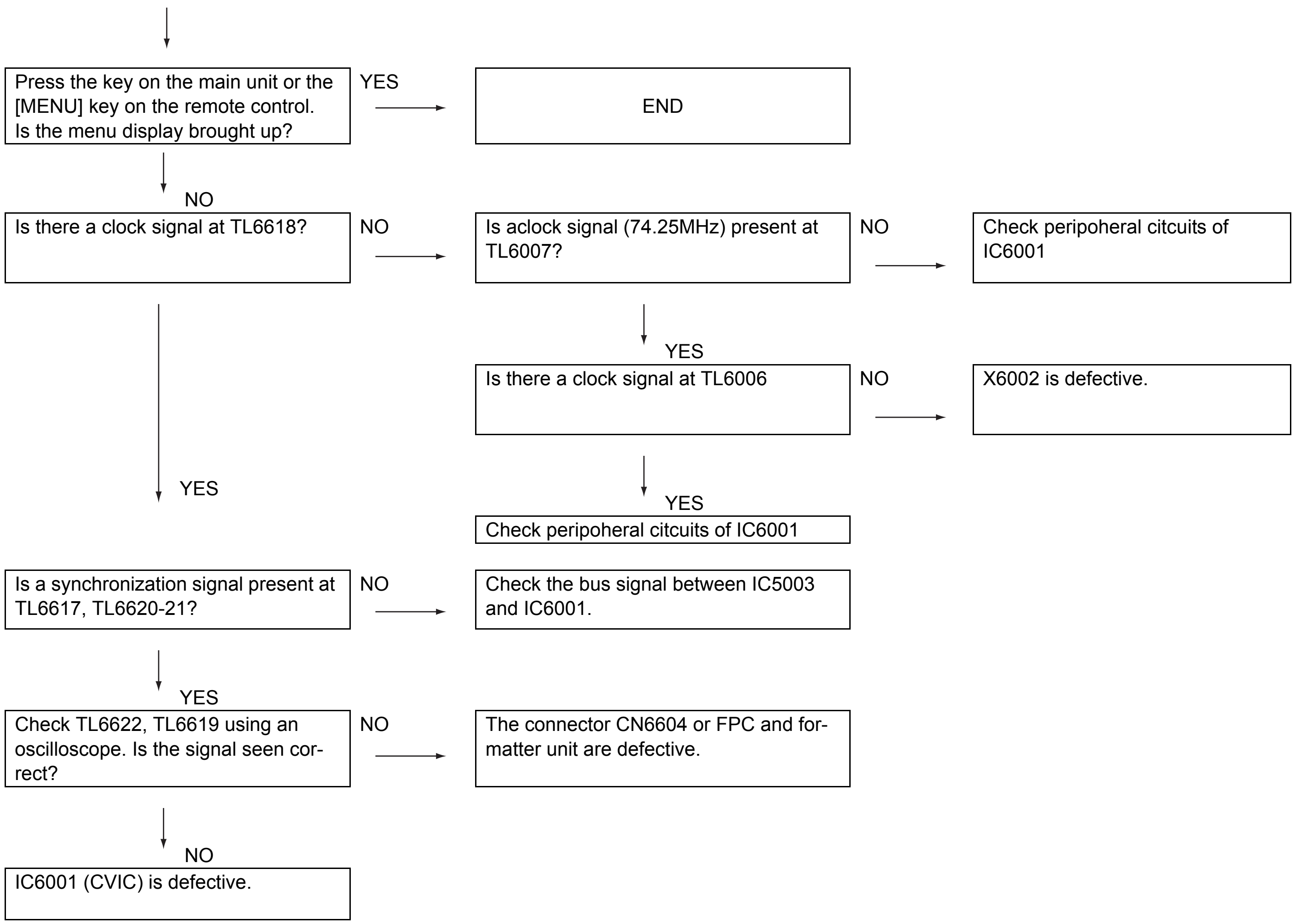
The signal passes through the same circuit as the RGB input. Mainly, check the SOG (Sync On Green) circuit and the color adjustment circuit. (480i and 576i are excluded.)

Since the VIDEO input enters CVIC through a different route than the RGB input, check the VIDEO IC.
(480i and 576i are excluded.)

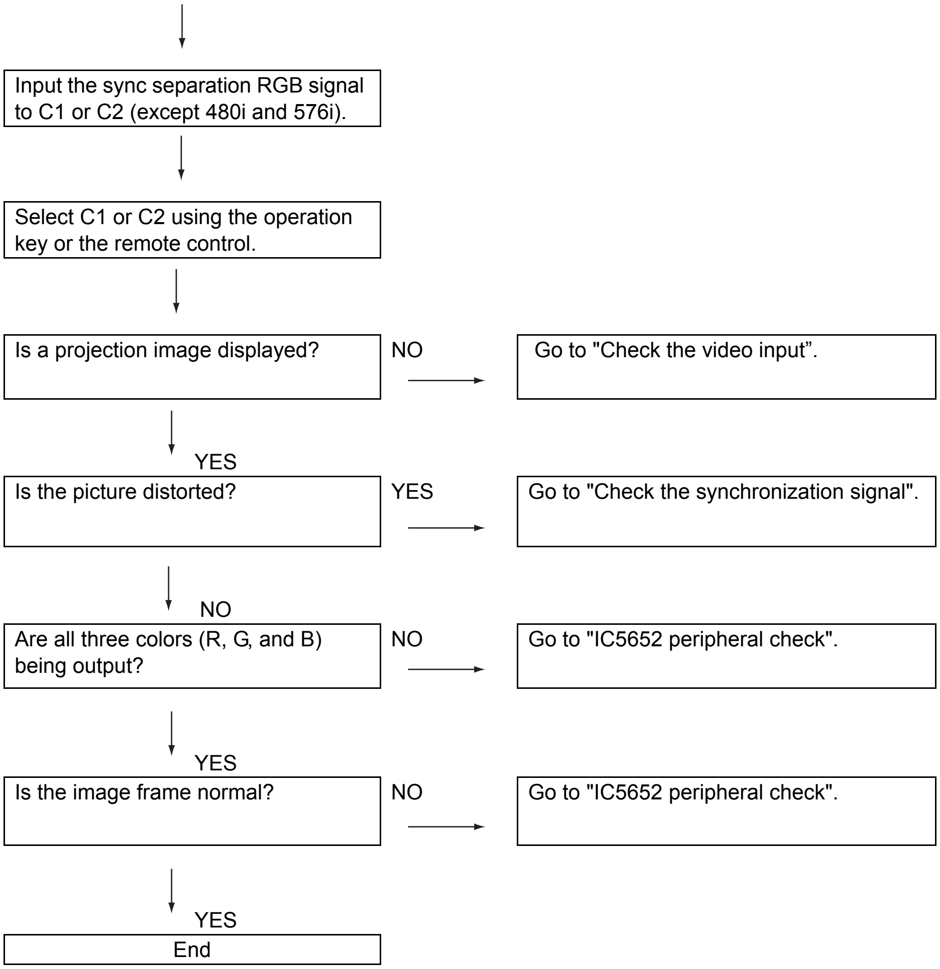
The video signal and the color signal pass through the same circuits as the RGB input. However, since the synchronization signal uses the VIDEO IC,
check the synchronization signal path.

The signal is reproduced in an IC specially designed for use with the TMDS, and it enters the CVIC.

Check OSD.


Press the key on the main unit or the [MENU] key on the remote control. Is the menu display brought up?
YES
END
NO
Is there a clock signal at TL6618?
NO
Is aclock signal (74.25MHz) present at TL6007?
NO
Check peripoheral citcuits of IC6001
YES
Is there a clock signal at TL6006
NO
X6002 is defective.
YES
YES
Check peripoheral citcuits of IC6001
Is a synchronization signal present at TL6617, TL6620-21?
NO
Check the bus signal between IC5003 and IC6001.
YES
Check TL6622, TL6619 using an oscilloscope. Is the signal seen correct?
NO
The connector CN6604 or FPC and formatter unit are defective.
NO
IC6001 (CVIC) is defective.

Check the RGB input.



Input the sync separation RGB signal to C1 or C2 (except 480i and 576i).

Select C1 or C2 using the operation key or the remote control.

Is a projection image displayed?

Go to "Check the video input”.

Is the picture distorted?

Go to "Check the synchronization signal".

Are all three colors (R, G, and B) being output?

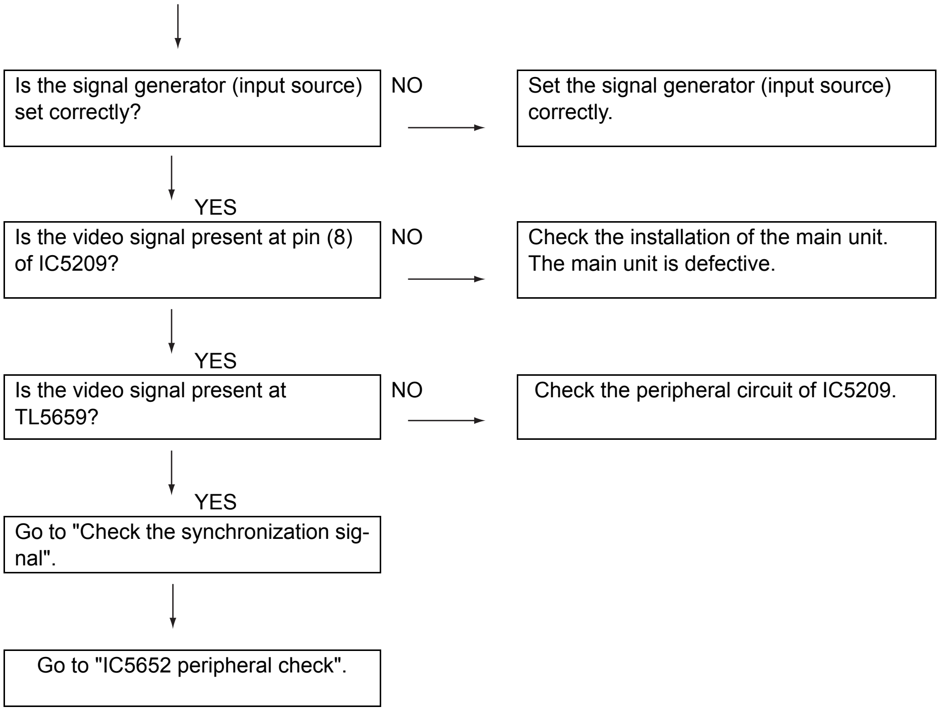
Go to "IC5652 peripheral check".

Is the image frame normal?

Go to "IC5652 peripheral check".

End

Check the video input.



Is the signal generator (input source) set correctly?

Set the signal generator (input source) correctly.

Is the video signal present at pin (8) of IC5209?

Check the installation of the main unit. The main unit is defective.

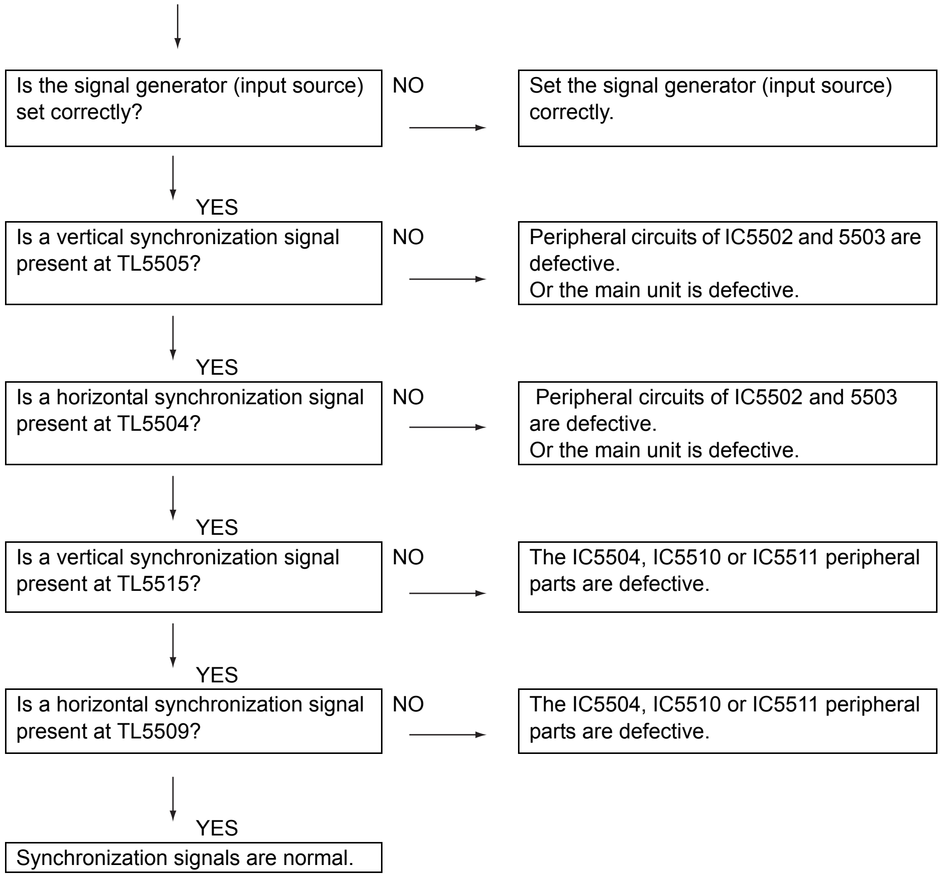
Is the video signal present at TL5659?

Check the peripheral circuit of IC5209.

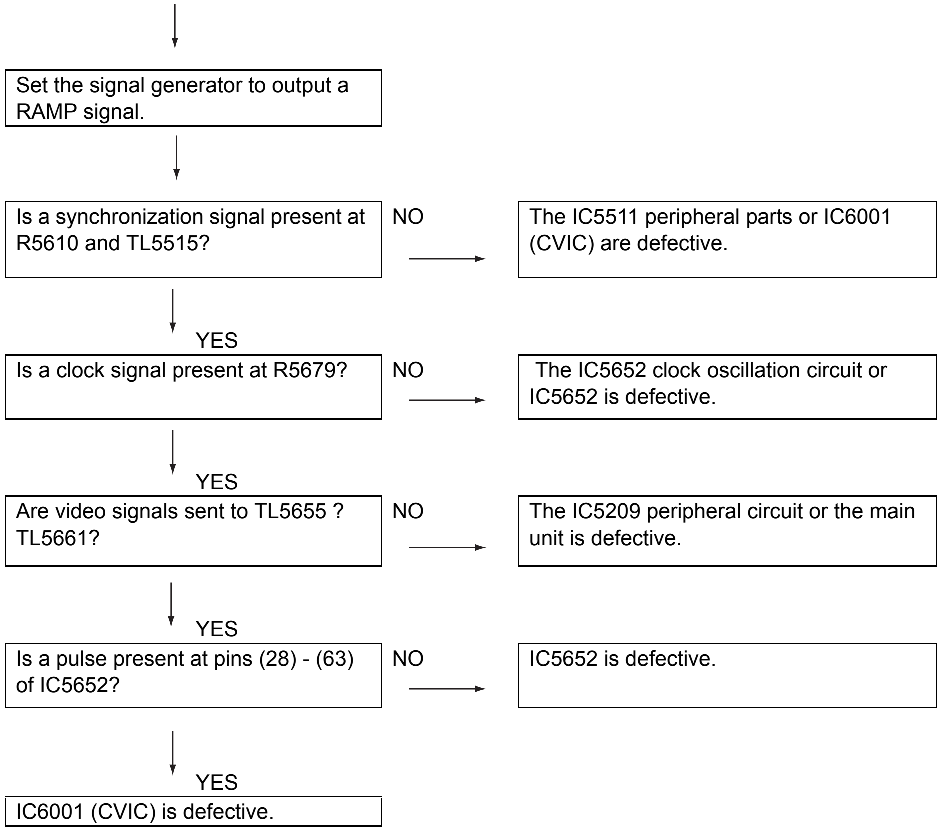
Go to "Check the synchronization signal".

Go to "IC5652 peripheral check".

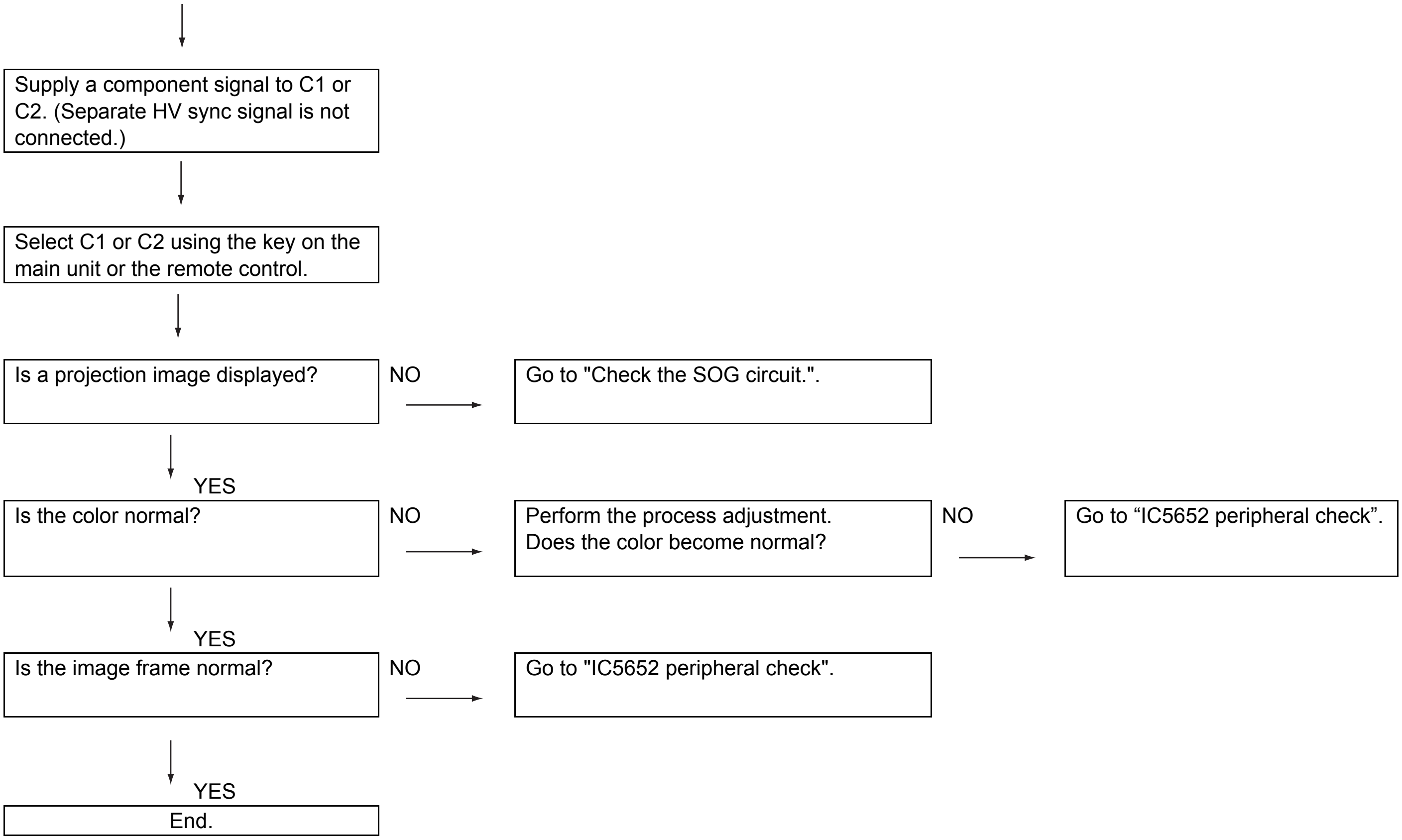
Check the synchronization signal.


Is the signal generator (input source) set correctly?
NO
Set the signal generator (input source) correctly.
YES
Is a vertical synchronization signal present at TL5505?
NO
Peripheral circuits of IC5502 and 5503 are defective.
Or the main unit is defective.
YES
Is a horizontal synchronization signal present at TL5504?
NO
Peripheral circuits of IC5502 and 5503 are defective.
Or the main unit is defective.
YES
Is a vertical synchronization signal present at TL5515?
NO
The IC5504, IC5510 or IC5511 peripheral parts are defective.
YES
Is a horizontal synchronization signal present at TL5509?
NO
The IC5504, IC5510 or IC5511 peripheral parts are defective.
YES
Synchronization signals are normal.

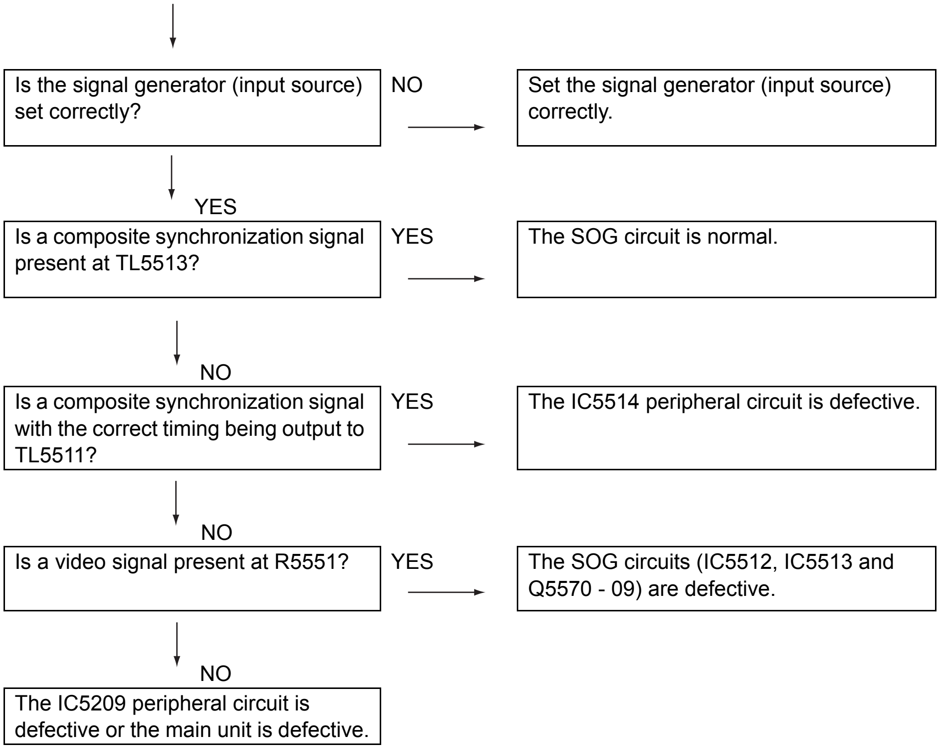
IC5652 peripheral check

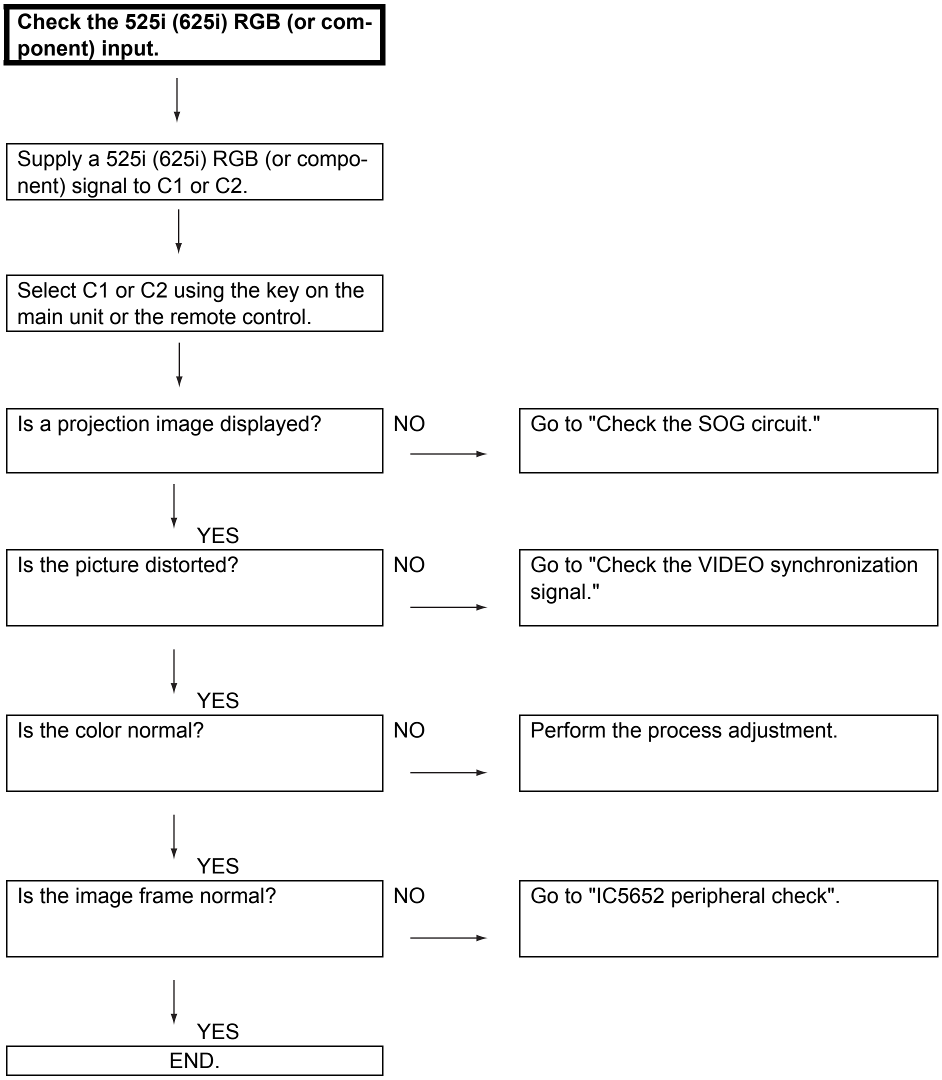

Set the signal generator to output a RAMP signal.
Is a synchronization signal present at R5610 and TL5515?
NO
The IC5511 peripheral parts or IC6001 (CVIC) are defective.
YES
Is a clock signal present at R5679?
NO
The IC5652 clock oscillation circuit or IC5652 is defective.
YES
Are video signals sent to TL5655 ? TL5661?
NO
The IC5209 peripheral circuit or the main unit is defective.
YES
Is a pulse present at pins (28) - (63) of IC5652?
NO
IC5652 is defective.
YES
IC6001 (CVIC) is defective.

Check the input at the components (480i and 576i are excluded).

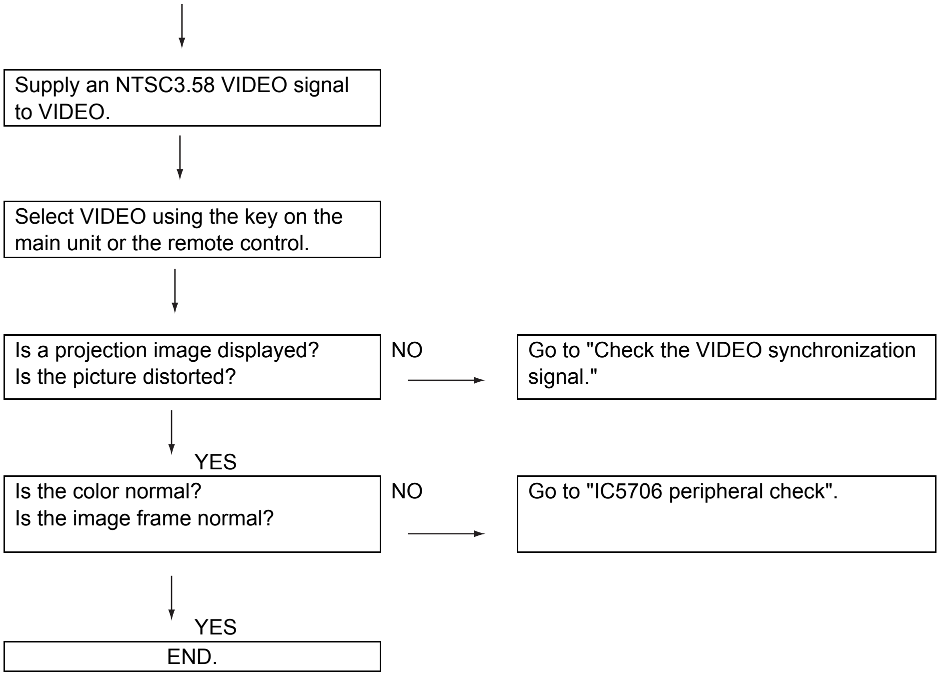

Supply a component signal to C1 or C2. (Separate HV sync signal is not connected.)
Select C1 or C2 using the key on the main unit or the remote control.
Is a projection image displayed?
NO
Go to "Check the SOG circuit.".
YES
Is the color normal?
NO
Perform the process adjustment. Does the color become normal?
NO
Go to “IC5652 peripheral check”.
YES
Is the image frame normal?
NO
Go to "IC5652 peripheral check".
YES
End.

Check the SOG circuit.

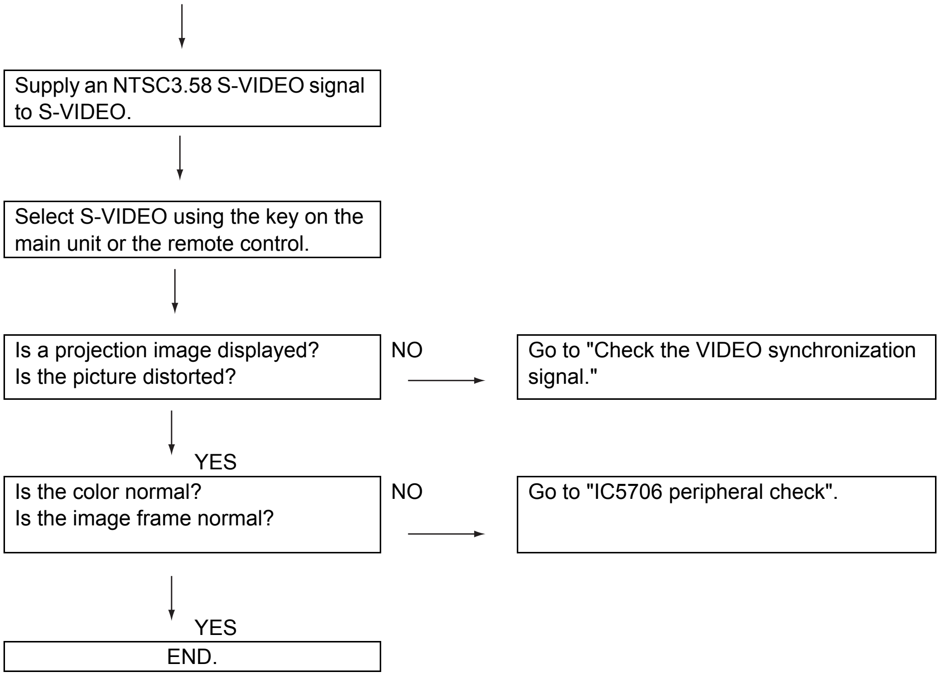

Is the signal generator (input source) set correctly?
NO
Set the signal generator (input source) correctly.
YES
Is a composite synchronization signal present at TL5513?
YES
The SOG circuit is normal.
NO
Is a composite synchronization signal with the correct timing being output to TL5511?
YES
The IC5514 peripheral circuit is defective.
NO
Is a video signal present at R5551?
YES
The SOG circuits (IC5512, IC5513 and Q5570 - 09) are defective.
NO
The IC5209 peripheral circuit is defective or the main unit is defective.

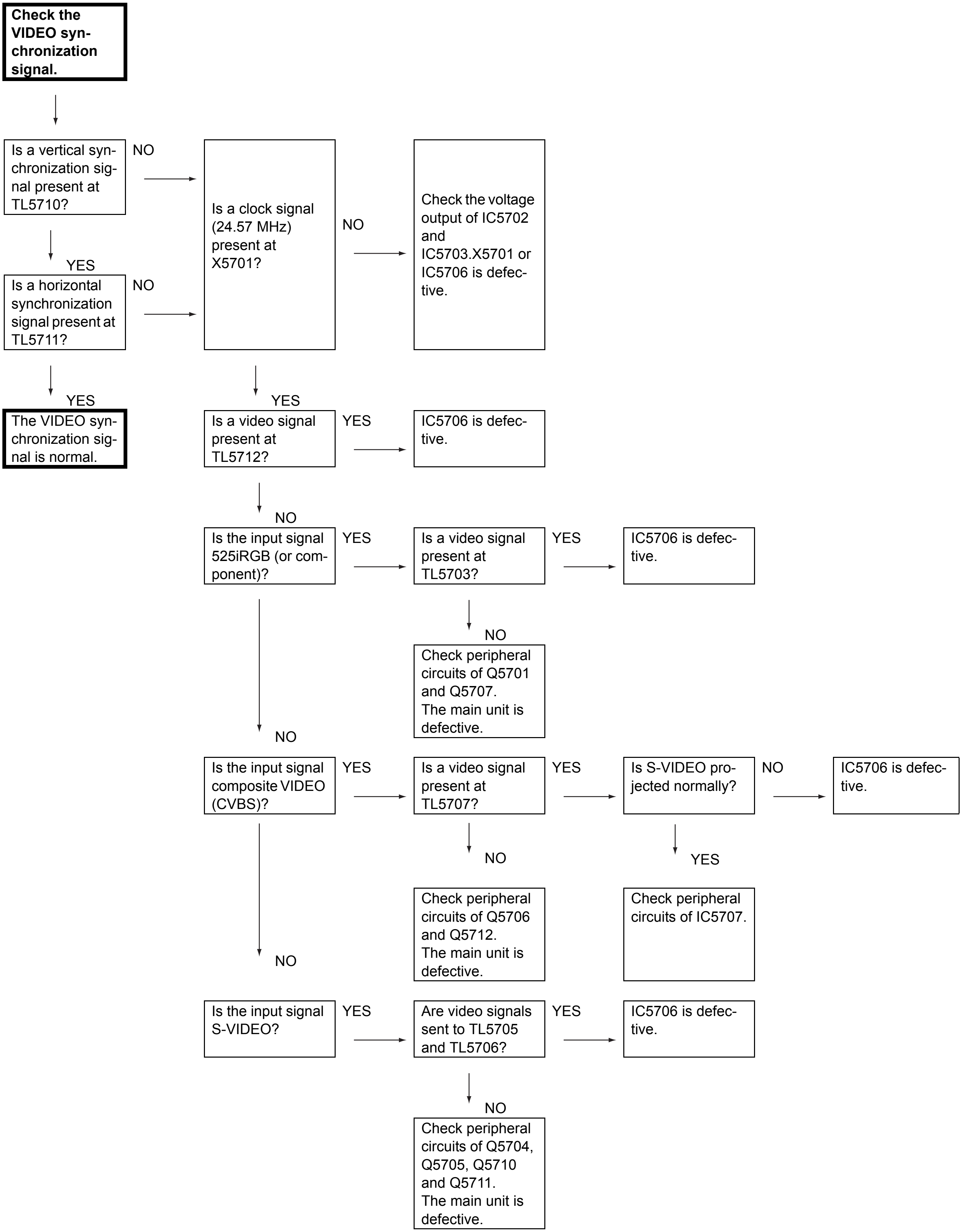

Check the 525i (625i) RGB (or component) input.
Supply a 525i (625i) RGB (or component) signal to C1 or C2.
Select C1 or C2 using the key on the main unit or the remote control.
Is a projection image displayed?
NO
Go to "Check the SOG circuit."
YES
Is the picture distorted?
NO
Go to "Check the VIDEO synchronization signal."
YES
Is the color normal?
NO
Perform the process adjustment.
YES
Is the image frame normal?
NO
Go to "IC5652 peripheral check".
YES
END.

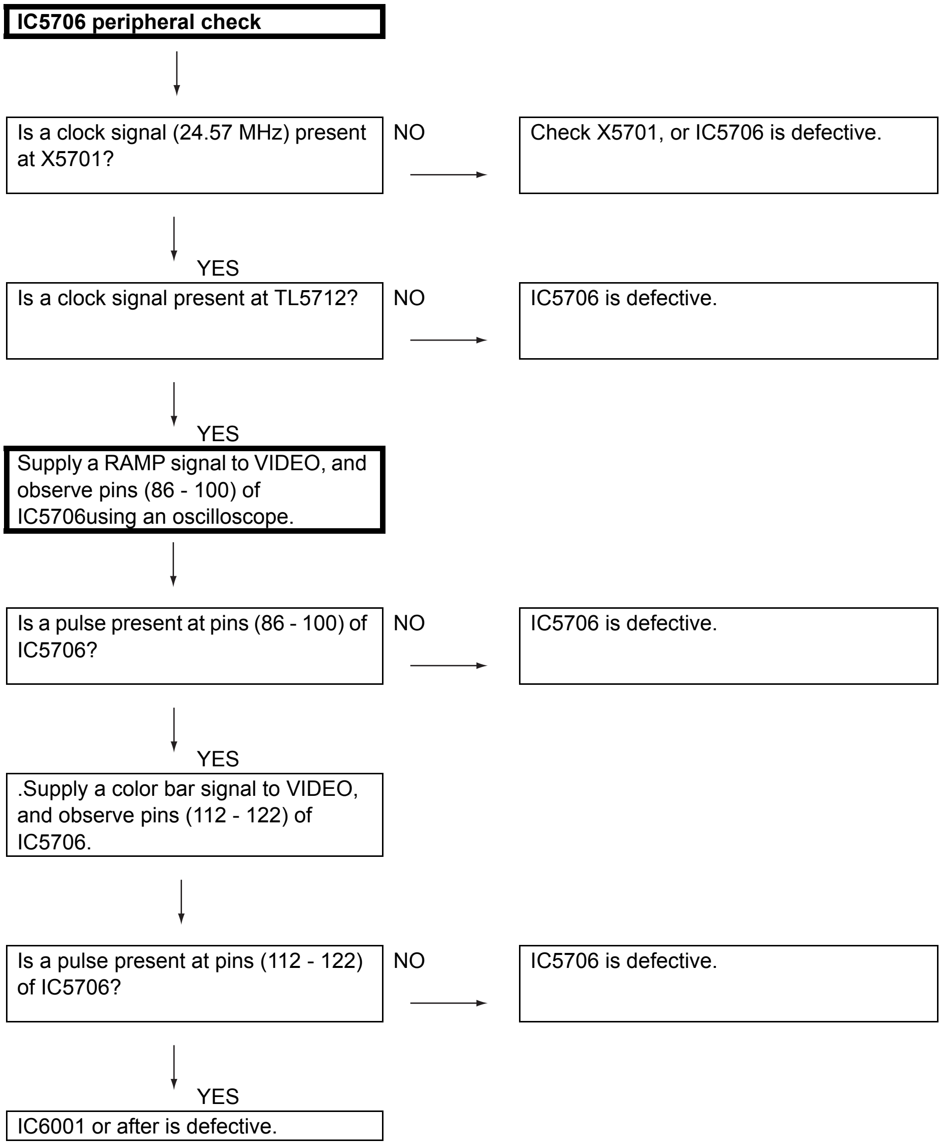
Check the composite VIDEO (CVBS) input.


Supply an NTSC3.58 VIDEO signal to VIDEO.
Select VIDEO using the key on the main unit or the remote control.
Is a projection image displayed? Is the picture distorted?
NO
Go to "Check the VIDEO synchronization signal."
YES
Is the color normal? Is the image frame normal?
NO
Go to "IC5706 peripheral check".
YES
END.

Check the S-VIDEO input.


Supply an NTSC3.58 S-VIDEO signal to S-VIDEO.
Select S-VIDEO using the key on the main unit or the remote control.
Is a projection image displayed? Is the picture distorted?
NO
Go to "Check the VIDEO synchronization signal."
YES
Is the color normal? Is the image frame normal?
NO
Go to "IC5706 peripheral check".
YES
END.


Check the VIDEO synchronization signal.
Is a vertical synchronization signal present at TL5710?
NO
YES
Is a horizontal synchronization signal present at TL5711?
NO
YES
The VIDEO synchronization signal is normal.
Is a clock signal (24.57 MHz) present at X5701?
NO
Check the voltage output of IC5702 and IC5703.X5701 or IC5706 is defective.
YES
Is a video signal present at TL5712?
YES
IC5706 is defective.
NO
Is the input signal 525iRGB (or component)?
YES
Is a video signal present at TL5703?
YES
IC5706 is defective.
NO
Check peripheral circuits of Q5701 and Q5707. The main unit is defective.
NO
Is the input signal composite VIDEO (CVBS)?
YES
Is a video signal present at TL5707?
YES
Is S-VIDEO projected normally?
NO
IC5706 is defective.
NO
Check peripheral circuits of Q5706 and Q5712. The main unit is defective.
YES
Check peripheral circuits of IC5707.
NO
Is the input signal S-VIDEO?
YES
Are video signals sent to TL5705 and TL5706?
YES
IC5706 is defective.
NO
Check peripheral circuits of Q5704, Q5705, Q5710 and Q5711. The main unit is defective.



IC5706 peripheral check

Is a clock signal (24.57 MHz) present at X5701?

Check X5701, or IC5706 is defective.

Is a clock signal present at TL5712?

IC5706 is defective.

Supply a RAMP signal to VIDEO, and observe pins (86 - 100) of IC5706using an oscilloscope.

Is a pulse present at pins (86 - 100) of IC5706?

IC5706 is defective.

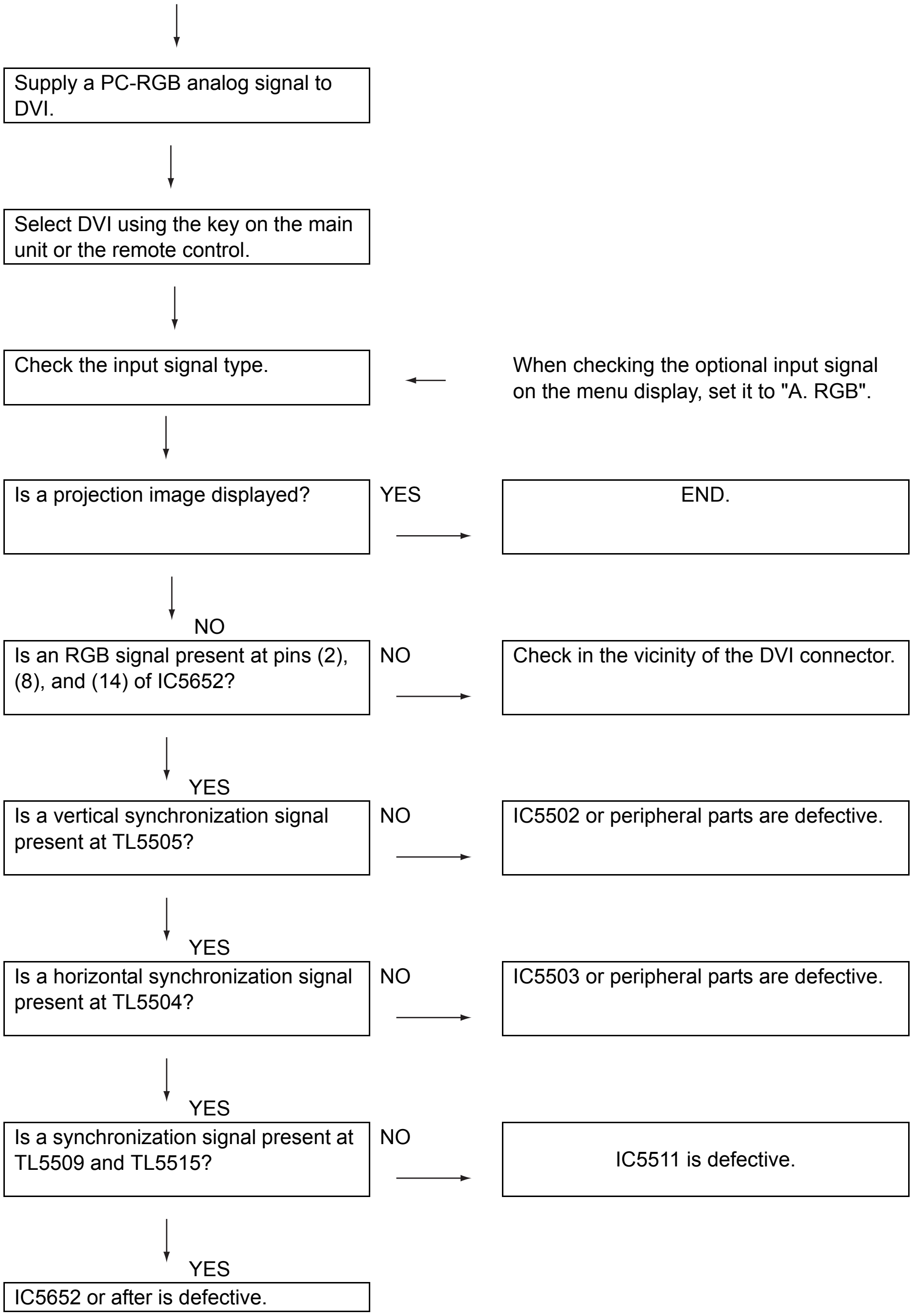
.Supply a color bar signal to VIDEO, and observe pins (112 - 122) of IC5706.

Is a pulse present at pins (112 - 122) of IC5706?

IC5706 is defective.

IC6001 or after is defective.

Check the DVI analog input.



Supply a PC-RGB analog signal to DVI.

Select DVI using the key on the main unit or the remote control.

Check the input signal type.

When checking the optional input signal on the menu display, set it to "A. RGB".

Is a projection image displayed?

END.

Is an RGB signal present at pins (2), (8), and (14) of IC5652?

Check in the vicinity of the DVI connector.

Is a vertical synchronization signal present at TL5505?

IC5502 or peripheral parts are defective.

Is a horizontal synchronization signal present at TL5504?

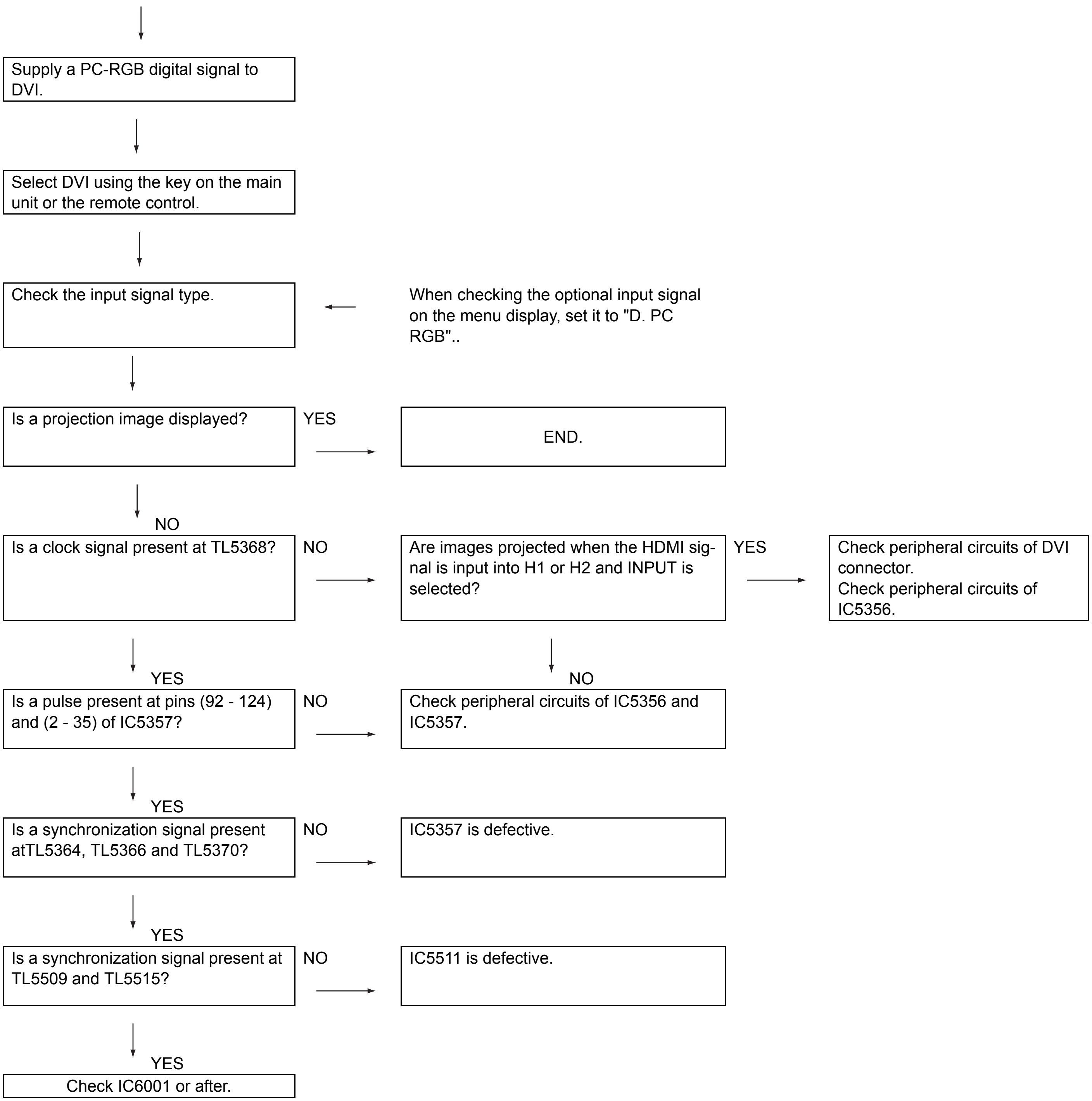
IC5503 or peripheral parts are defective.

Is a synchronization signal present at TL5509 and TL5515?

IC5511 is defective.

IC5652 or after is defective.

Check the DVI digital/HDMI



Supply a PC-RGB digital signal to DVI.

Select DVI using the key on the main unit or the remote control.

Check the input signal type.

When checking the optional input signal on the menu display, set it to "D. PC RGB"..

Is a projection image displayed?

END.

Is a clock signal present at TL5368?

Are images projected when the HDMI signal is input into H1 or H2 and INPUT is selected?

Check peripheral circuits of DVI connector.
Check peripheral circuits of IC5356.

Is a pulse present at pins (92 - 124) and (2 - 35) of IC5357?

Check peripheral circuits of IC5356 and IC5357.

Is a synchronization signal present atTL5364, TL5366 and TL5370?

IC5357 is defective.

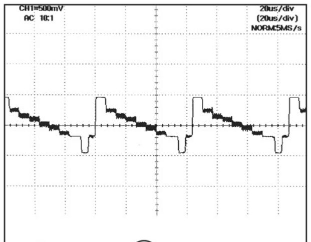
Is a synchronization signal present at TL5509 and TL5515?

IC5511 is defective.

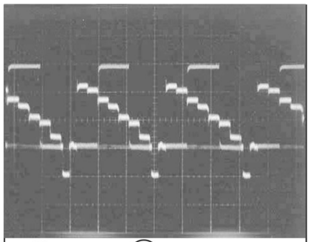
Check IC6001 or after.

CHAPTER 8. WAVEFORMS

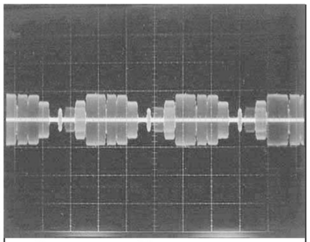
[1] WAVEFORMS



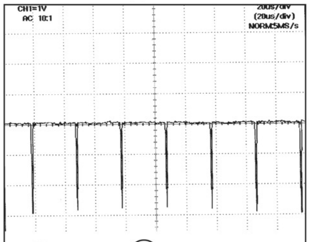
① P3580㉜
(VIDEO AC)
H : 20μ sec/div
V : 500mV/div



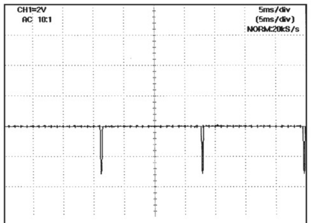
② P3580㉞
(Y-signal)
H : 20μ sec/div
V : 0.2V/div



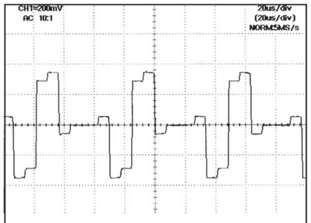
③ P3580 ④
(CHROMA signal)
H : 20μ sec/div
V : 0.2V/div



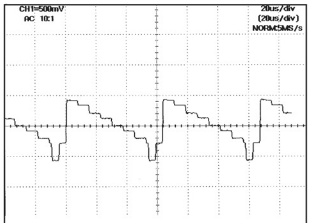
④ P3580㊼
(RGB)
H : 20μ sec/div
V : 1V/div



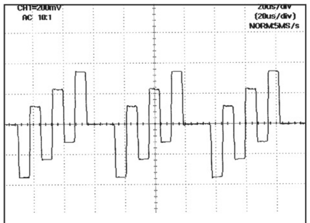
⑤ P3580⑰
(RGB)
H : 5m sec/div
V : 2V/div



⑥ P3580(56)
(RGB AC)
H : 20μ sec/div
V : 200mV/div



⑦ P3580(58)
(RGB AC)
H : 20μ sec/div
V : 500mV/div



⑧ P3580(60)
(RGB AC)
H : 20μ sec/div
V : 200mV/div

[2] WAVEFORM MEASUREMENT CONDITION

1. WAVEFORM MEASUREMENT CONDITION:

1. Waveforms at test points are observed at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose.

CHAPTER 9. SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

1. VOLTAGE MEASUREMENT CONDITION:

1. Voltages at test points are measured at the supply voltage of AC 100V/CROSS 10V-240. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

2. INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. he unit of resistance “Ω” is omitted.
(K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.
(J=± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/10W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.

Ⓒ : Solid Ⓦ : Cement

Ⓢ : Oxide Film Ⓣ : Special

Ⓝ : Metal Coating

CAPACITOR

1. All capacitors are μF, unless otherwise noted.
(P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.
(ML): Mylar (TA): Tantalum
(PF): Polypro Film (ST): Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

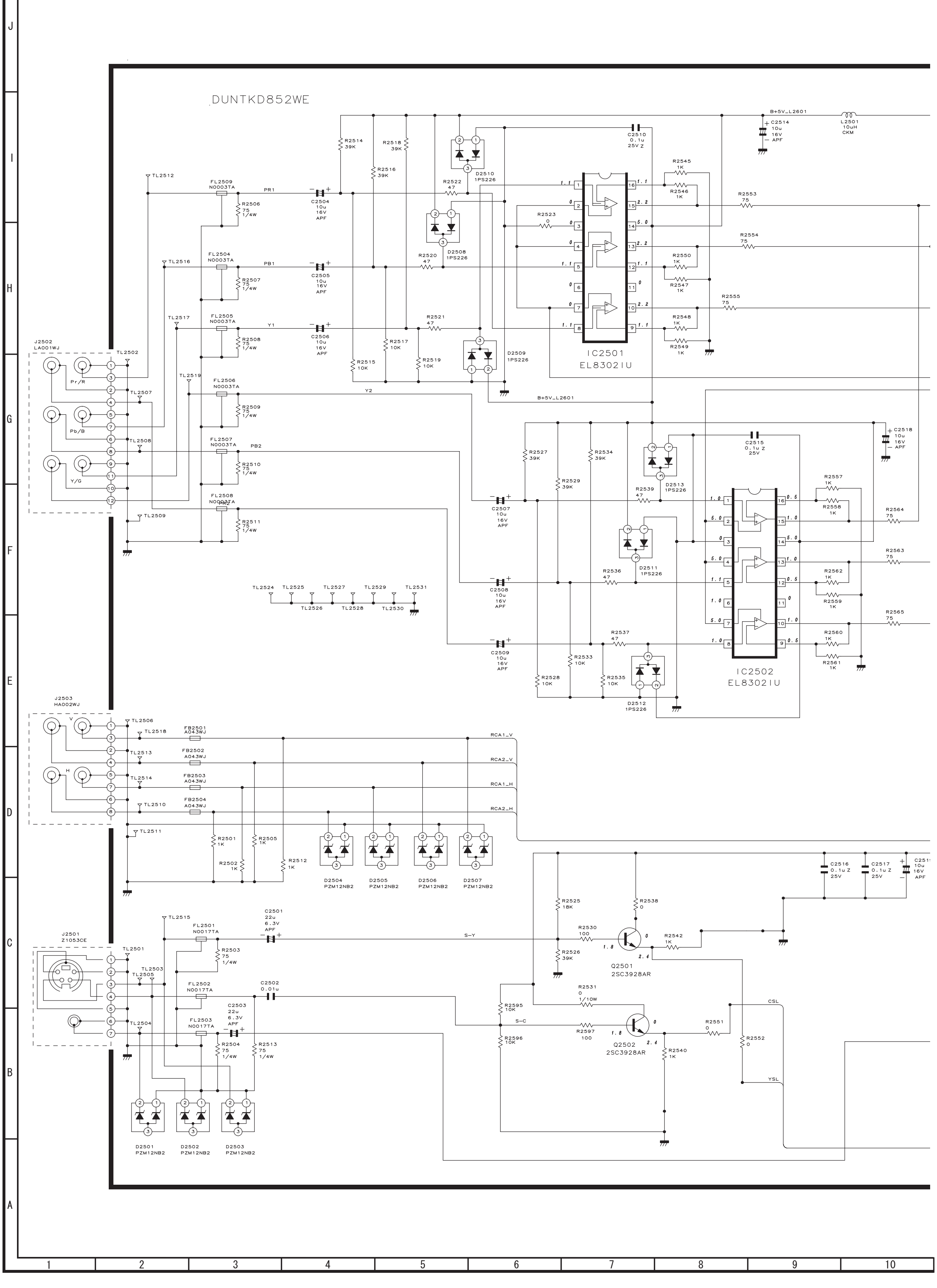
1. **DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.**
2. **SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.**

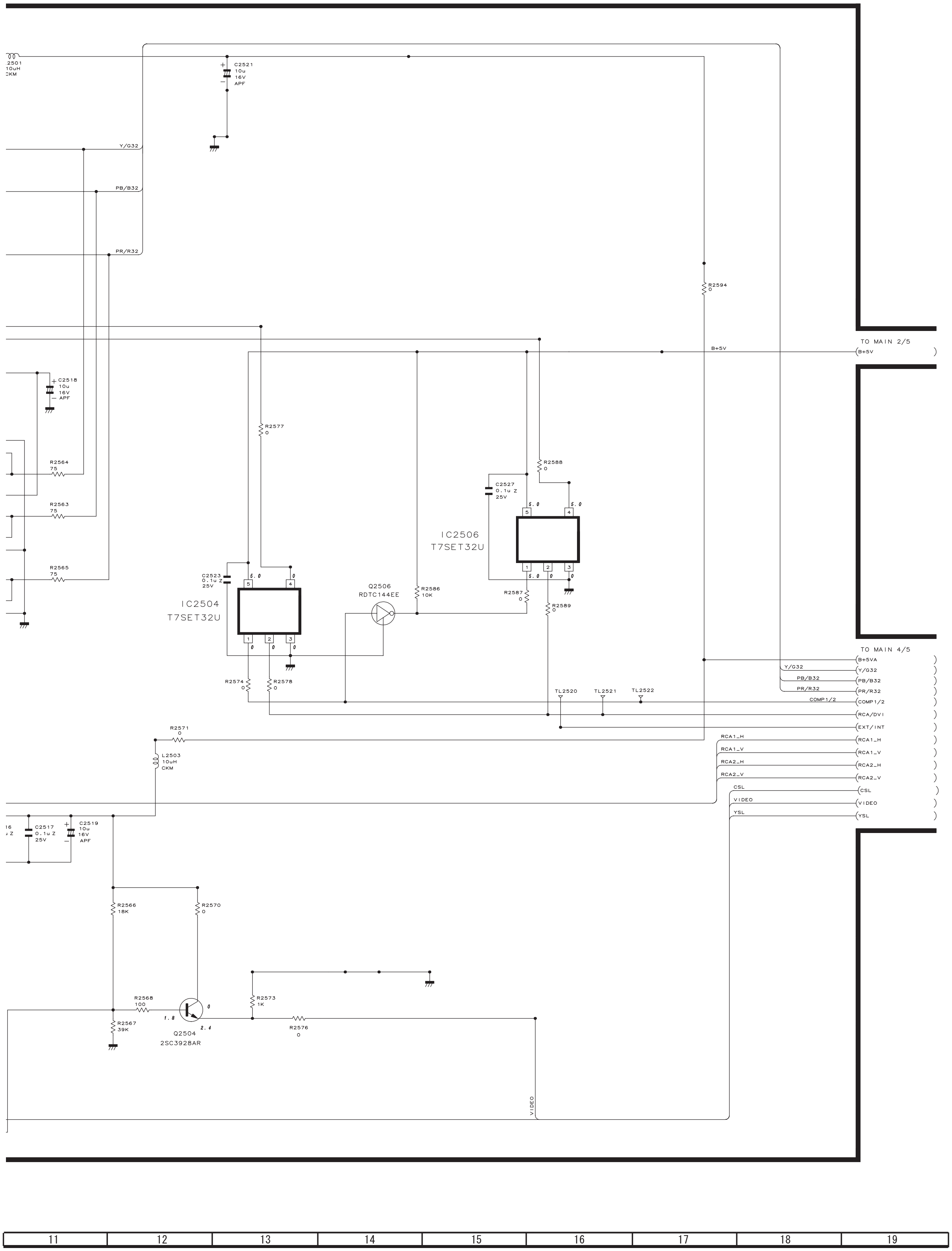
IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH “⚠” (▨) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

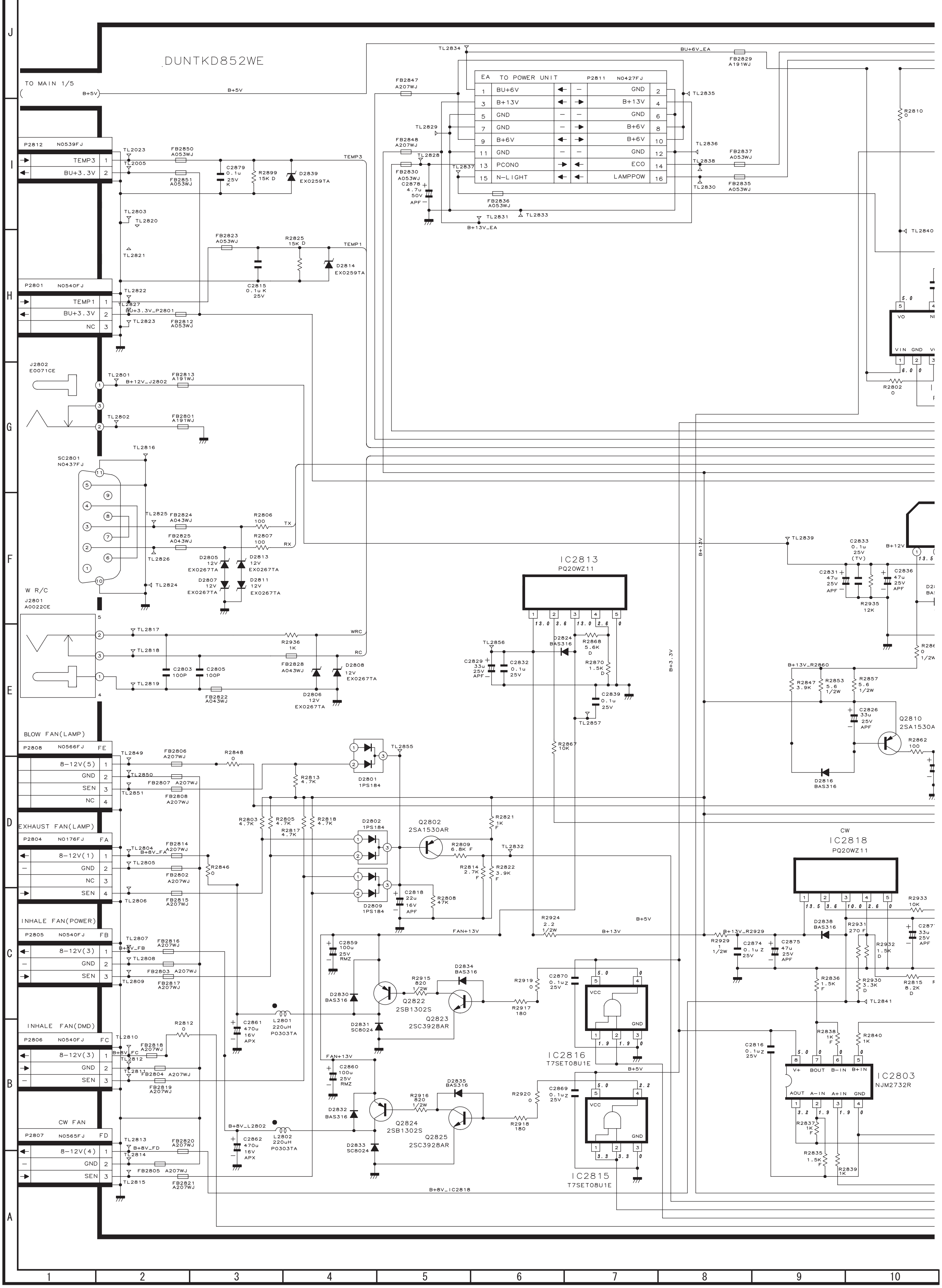
[2] SCHEMATIC DIAGRAM

■MAIN Unit-1


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
DUNTKD852WE
B+5V_L2601
C2514 10u 16V APF
L2501 10uH CKM
R2514 39K
R2518 39K
R2516 39K
C2510 0.1u 25V Z
D2510 1PS226
R2522 47
R2545 1K
R2546 1K
R2553 75
R2523 0
R2554 75
R2550 1K
R2547 1K
R2555 75
R2548 1K
R2549 1K
IC2501 EL8302IU
D2508 1PS226
R2520 47
R2521 47
R2517 10K
R2519 10K
R2515 10K
D2509 1PS226
TL2512
FL2509 N0003TA
PR1
R2506 75 1/4W
C2504 10u 16V APF
TL2516
FL2504 N0003TA
PB1
R2507 75 1/4W
C2505 10u 16V APF
TL2517
FL2505 N0003TA
Y1
R2508 75 1/4W
C2506 10u 16V APF
J2502 LA001WJ
TL2502
Pr/R
Pb/B
Y/G
TL2507
TL2519
FL2506 N0003TA
Y2
R2509 75 1/4W
TL2508
FL2507 N0003TA
PB2
R2510 75 1/4W
FL2508 N0003TA
PR2
R2511 75 1/4W
TL2509
B+5V_L2601
C2518 10u 16V APF
C2515 0.1u Z 25V
R2527 39K
R2534 39K
D2513 1PS226
R2529 39K
R2539 47
C2507 10u 16V APF
R2557 1K
R2558 1K
R2564 75
D2511 1PS226
R2536 47
C2508 10u 16V APF
R2563 75
R2562 1K
R2559 1K
R2565 75
R2537 47
R2560 1K
R2561 1K
C2509 10u 16V APF
R2533 10K
R2528 10K
R2535 10K
D2512 1PS226
IC2502 EL8302IU
TL2524
TL2525
TL2527
TL2529
TL2531
TL2526
TL2528
TL2530
J2503 HA002WJ
TL2506
V
H
TL2518
FB2501 A043WJ
RCA1_V
TL2513
FB2502 A043WJ
RCA2_V
TL2514
FB2503 A043WJ
RCA1_H
TL2510
FB2504 A043WJ
RCA2_H
TL2511
R2501 1K
R2505 1K
R2502 1K
R2512 1K
D2504 PZM12NB2
D2505 PZM12NB2
D2506 PZM12NB2
D2507 PZM12NB2
C2516 0.1u Z 25V
C2517 0.1u Z 25V
10u 16V APF
R2525 18K
R2538 0
R2530 100
S-Y
R2542 1K
R2526 39K
Q2501 2SC3928AR
J2501 Z1053CE
TL2515
FL2501 N0017TA
C2501 22u 6.3V APF
R2503 75 1/4W
TL2501
TL2503
TL2505
FL2502 N0017TA
C2502 0.01u
R2531 0 1/10W
R2595 10K
S-C
R2597 100
Q2502 2SC3928AR
R2551 0
CSL
R2552 0
R2596 10K
R2540 1K
YSL
TL2504
FL2503 N0017TA
C2503 22u 6.3V APF
R2504 75 1/4W
R2513 75 1/4W
D2501 PZM12NB2
D2502 PZM12NB2
D2503 PZM12NB2


2501
10uH
CKM
C2521
10u
16V
APF
Y/G32
PB/B32
PR/R32
R2594
0
TO MAIN 2/5
B+5V
B+5V
C2518
10u
16V
APF
R2577
0
R2564
75
R2563
75
R2565
75
R2588
0
C2527
0.1u Z
25V
5.0
5.0
IC2506
T7SET32U
5.0
0
0
C2523
0.1u Z
25V
5.0
0
IC2504
T7SET32U
0
0
0
Q2506
RDTC144EE
R2586
10K
R2587
0
R2589
0
R2574
0
R2578
0
TL2520
TL2521
TL2522
TO MAIN 4/5
B+5VA
Y/G32
PB/B32
PR/R32
COMP1/2
RCA/DVI
EXT/INT
RCA1_H
RCA1_V
RCA2_H
RCA2_V
CSL
VIDEO
YSL
R2571
0
L2503
10uH
CKM
16
u Z
C2517
0.1u Z
25V
C2519
10u
16V
APF
R2566
18K
R2570
0
R2573
1K
R2568
100
R2567
39K
1.8
0
2.4
Q2504
2SC3928AR
R2576
0
VIDEO
11
12
13
14
15
16
17
18
19

■MAIN Unit-2


DUNTKD852WE
TO MAIN 1/5
B+5V
P2812 N0539FJ
TEMP3
BU+3.3V
TL2023
TL2005
FB2850 A053WJ
FB2851 A053WJ
C2879 0.1u 25V K
R2899 15K D
D2839 EX0259TA
TL2803
TL2820
TL2821
FB2823 A053WJ
R2825 15K D
TEMP1
D2814 EX0259TA
C2815 0.1u K 25V
P2801 N0540FJ
TEMP1
BU+3.3V
NC
TL2822
TL2827
B+3.3V_P2801
TL2823
FB2812 A053WJ
J2802 E0071CE
TL2801
B+12V_J2802
FB2813 A191WJ
TL2802
FB2801 A191WJ
TL2816
SC2801 N0437FJ
TL2825
FB2824 A043WJ
FB2825 A043WJ
R2806 100
TX
R2807 100
RX
TL2826
D2805 12V EX0267TA
D2813 12V EX0267TA
D2807 12V EX0267TA
D2811 12V EX0267TA
TL2824
W R/C
J2801 A0022CE
TL2817
TL2818
TL2819
C2803 100P
C2805 100P
R2936 1K
WRC
RC
FB2828 A043WJ
D2808 12V EX0267TA
D2806 12V EX0267TA
FB2822 A043WJ
BLOW FAN(LAMP)
P2808 N0566FJ FE
8-12V(5)
GND
SEN
NC
TL2849
TL2850
TL2851
FB2806 A207WJ
FB2807 A207WJ
FB2808 A207WJ
R2848 0
D2801 1PS184
TL2855
R2813 4.7K
R2803 4.7K
R2805 4.7K
R2817 4.7K
R2818 4.7K
D2802 1PS184
D2809 1PS184
Q2802 2SA1530AR
R2809 6.8K F
R2821 1K F
TL2832
R2814 2.7K F
R2822 3.9K F
C2818 22u 16V APF
R2808 47K
EXHAUST FAN(LAMP)
P2804 N0176FJ FA
8-12V(1)
GND
NC
SEN
TL2804
B+8V_FA
FB2814 A207WJ
TL2805
FB2802 A207WJ
R2846 0
TL2806
FB2815 A207WJ
INHALE FAN(POWER)
P2805 N0540FJ FB
8-12V(3)
GND
SEN
TL2807
B+8V_FB
FB2816 A207WJ
TL2808
FB2803 A207WJ
TL2809
FB2817 A207WJ
INHALE FAN(DMD)
P2806 N0540FJ FC
8-12V(3)
GND
SEN
TL2810
B+8V_FC
FB2818 A207WJ
TL2812
TL2811
FB2804 A207WJ
FB2819 A207WJ
R2812 0
CW FAN
P2807 N0565FJ FD
8-12V(4)
GND
SEN
TL2813
B+8V_FD
FB2820 A207WJ
TL2814
FB2805 A207WJ
TL2815
FB2821 A207WJ
FAN+13V
C2859 100u 25V RMZ
D2830 BAS316
D2831 SC8024
Q2822 2SB1302S
R2915 820 1/2W
D2834 BAS316
Q2823 2SC3928AR
R2917 180
C2861 470u 16V APX
L2801 220uH P0303TA
C2860 100u 25V RMZ
D2832 BAS316
D2833 SC8024
Q2824 2SB1302S
R2916 820 1/2W
D2835 BAS316
Q2825 2SC3928AR
R2918 180
B+8V_L2802
C2862 470u 16V APX
L2802 220uH P0303TA
B+8V_IC2818
R2919 0
C2870 0.1uZ 25V
IC2816 T7SET08U1E
R2920 0
C2869 0.1uZ 25V
IC2815 T7SET08U1E
VCC
GND
B+5V
TL2834
BU+6V_EA
FB2829 A191WJ
FB2847 A207WJ
EA TO POWER UNIT P2811 N0427FJ
BU+6V
B+13V
GND
B+6V
PCONO
N-LIGHT
ECO
LAMPPOW
TL2835
TL2829
FB2848 A207WJ
TL2828
FB2830 A053WJ
C2878 4.7u 50V APF
TL2837
TL2836
FB2837 A053WJ
TL2838
TL2830
FB2835 A053WJ
FB2836 A053WJ
TL2831
TL2833
B+13V_EA
R2810 0
TL2840
VO
VIN GND
R2802 0
IC2813 PQ20WZ11
13.0 3.6 13.0 2.6 0
TL2856
D2824 BAS316
R2868 5.6K D
C2829 33u 25V APF
C2832 0.1u 25V
R2870 1.5K D
C2839 0.1u 25V
TL2857
R2867 10K
B+3.3V
TL2839
C2833 0.1u 25V (TV)
B+12V
C2831 47u 25V APF
C2836 47u 25V APF
R2935 12K
B+13V_R2860
R2847 3.9K
R2853 5.6 1/2W
R2857 5.6 1/2W
C2826 33u 25V APF
Q2810 2SA1530A
R2862 100
D2816 BAS316
CW
IC2818 PQ20WZ11
13.5 3.6 10.0 2.6 0
R2933 10K
R2924 2.2 1/2W
B+5V
B+13V
B+13V_R2929
R2929 1 1/2W
C2874 0.1u Z 25V
C2875 47u 25V APF
D2838 BAS316
R2931 270 F
R2932 1.5K D
R2836 1.5K F
R2930 3.3K D
R2815 8.2K D
TL2841
R2838 1K F
R2840 1K
C2816 0.1uZ 25V
V+ BOUT B-IN B+IN
AOUT A-IN A+IN GND
IC2803 NJM2732R
3.2 1.9 1.9 0
R2837 1K F
R2835 1.5K F
R2839 1K
J
I
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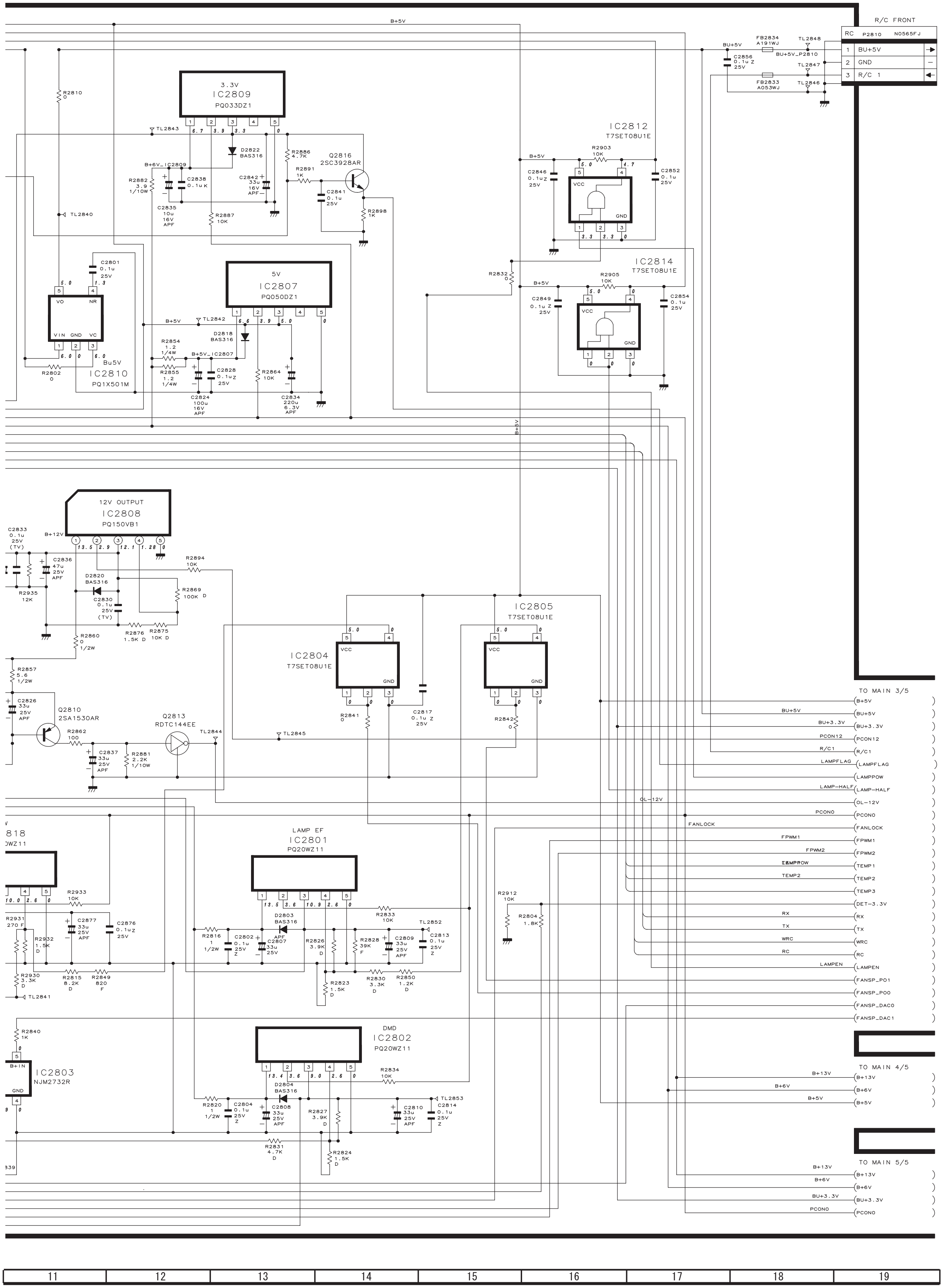
B+5V
R/C FRONT
RC P2810 N0565FJ
1 BU+5V
2 GND
3 R/C 1
FB2834 A191WJ
FB2833 A053WJ
TL2848
TL2847
TL2846
BU+5V
BU+5V_P2810
C2856 0.1u Z 25V
3.3V IC2809 PQ033DZ1
R2810 0
TL2843
D2822 BAS316
R2886 4.7K
Q2816 2SC3928AR
B+6V_IC2809
R2882 3.9 1/10W
C2838 0.1u K
C2842 33u 16V APF
R2891 1K
C2841 0.1u 25V
R2898 1K
C2835 10u 16V APF
R2887 10K
TL2840
IC2812 T7SET08U1E
R2903 10K
B+5V
C2846 0.1u Z 25V
C2852 0.1u 25V
VCC
GND
IC2814 T7SET08U1E
R2832 0
R2905 10K
C2849 0.1u Z 25V
C2854 0.1u 25V
C2801 0.1u 25V
5V IC2807 PQ050DZ1
VO NR VIN GND VC
TL2842
D2818 BAS316
R2854 1.2 1/4W
B+5V_IC2807
R2855 1.2 1/4W
C2828 0.1u Z 25V
R2864 10K
C2824 100u 16V APF
C2834 220u 6.3V APF
R2802 0
Bu5V IC2810 PQ1X501M
12V OUTPUT IC2808 PQ150VB1
B+12V
C2833 0.1u 25V (TV)
C2836 47u 25V APF
R2894 10K
D2820 BAS316
R2869 100K D
C2830 0.1u 25V (TV)
R2935 12K
R2876 1.5K D
R2875 10K D
R2860 0 1/2W
R2857 5.6 1/2W
C2826 33u 25V APF
Q2810 2SA1530AR
Q2813 RDTC144EE
TL2844
R2862 100
C2837 33u 25V APF
R2881 2.2K 1/10W
TL2845
IC2804 T7SET08U1E
IC2805 T7SET08U1E
C2817 0.1u Z 25V
R2841 0
R2842 0
TO MAIN 3/5
B+5V
BU+5V
BU+3.3V
PCON12
R/C1
LAMPFLAG
LAMPPOW
LAMP-HALF
OL-12V
PCON0
FANLOCK
FPWM1
FPWM2
TEMP1
TEMP2
TEMP3
DET-3.3V
RX
TX
WRC
RC
LAMPEN
FANSP_PO1
FANSP_PO0
FANSP_DAC0
FANSP_DAC1
818
0WZ11
R2933 10K
R2931 270 F
C2877 33u 25V APF
C2876 0.1u Z 25V
R2932 1.5K D
R2930 3.3K D
R2815 8.2K D
R2849 820 F
TL2841
LAMP EF IC2801 PQ20WZ11
R2833 10K
TL2852
D2803 BAS316
R2816 1 1/2W
C2802 0.1u 25V Z
C2807 33u 25V APF
R2826 3.9K D
R2828 39K F
C2809 33u 25V APF
C2813 0.1u 25V Z
R2823 1.5K D
R2830 3.3K D
R2850 1.2K D
R2912 10K
R2804 1.8K
R2840 1K
B+IN GND
IC2803 NJM2732R
DMD IC2802 PQ20WZ11
R2834 10K
D2804 BAS316
TL2853
R2820 1 1/2W
C2804 0.1u 25V Z
C2808 33u 25V APF
R2827 3.9K D
C2810 33u 25V APF
C2814 0.1u 25V Z
R2831 4.7K D
R2824 1.5K D
TO MAIN 4/5
B+13V
B+6V
B+5V
TO MAIN 5/5
B+13V
B+6V
BU+3.3V
PCON0
11
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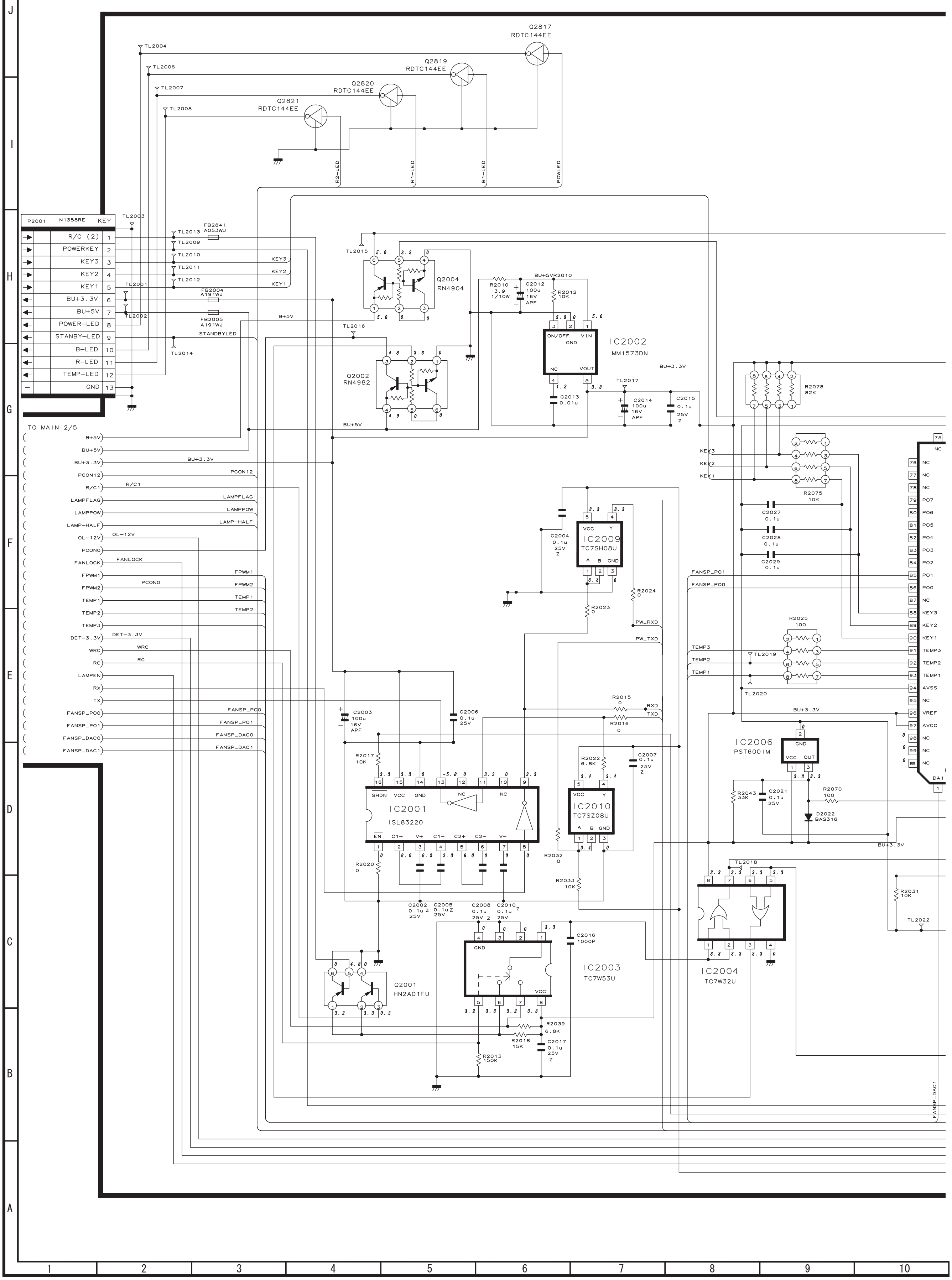
■MAIN Unit-3


J
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D
C
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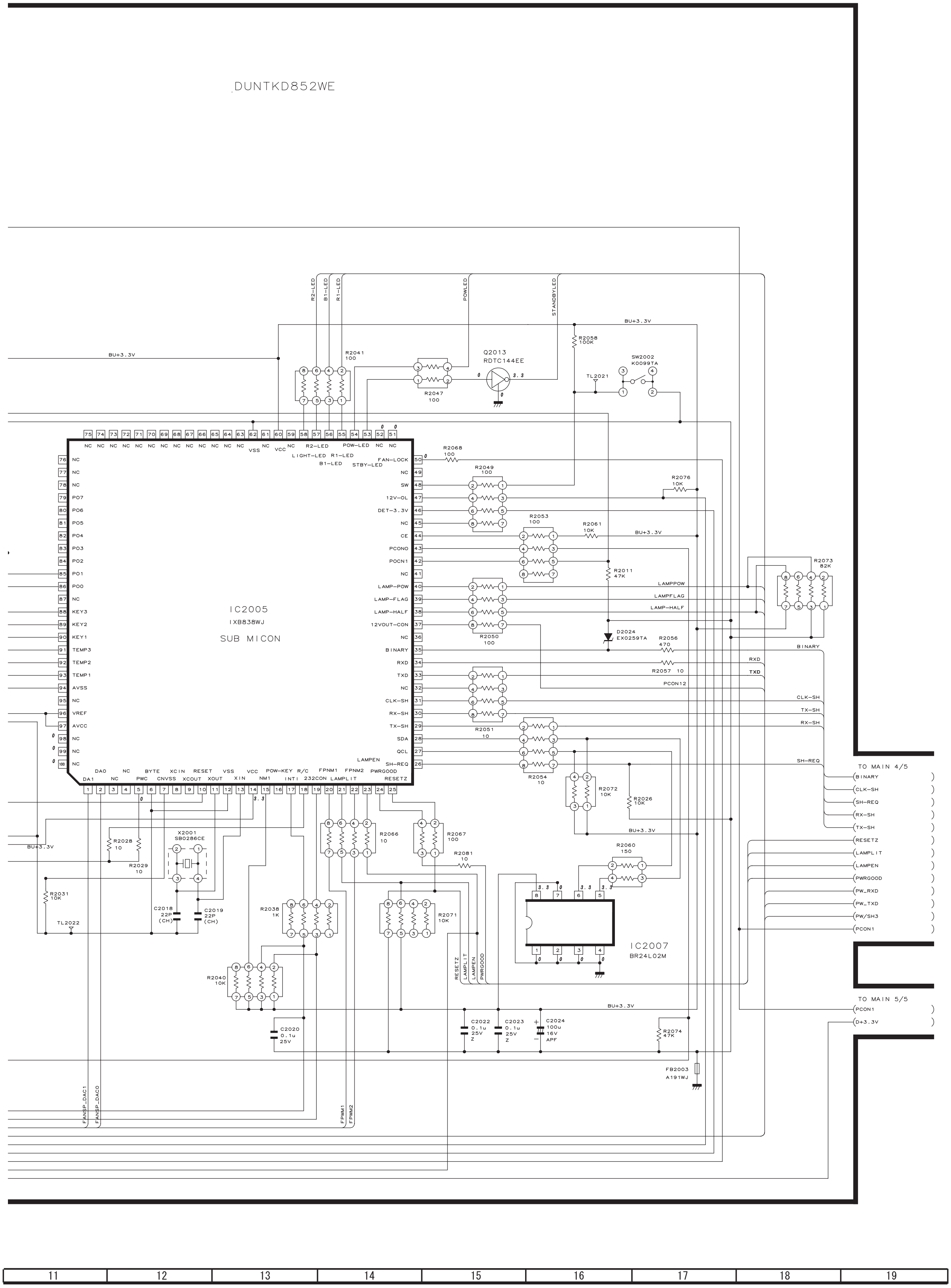
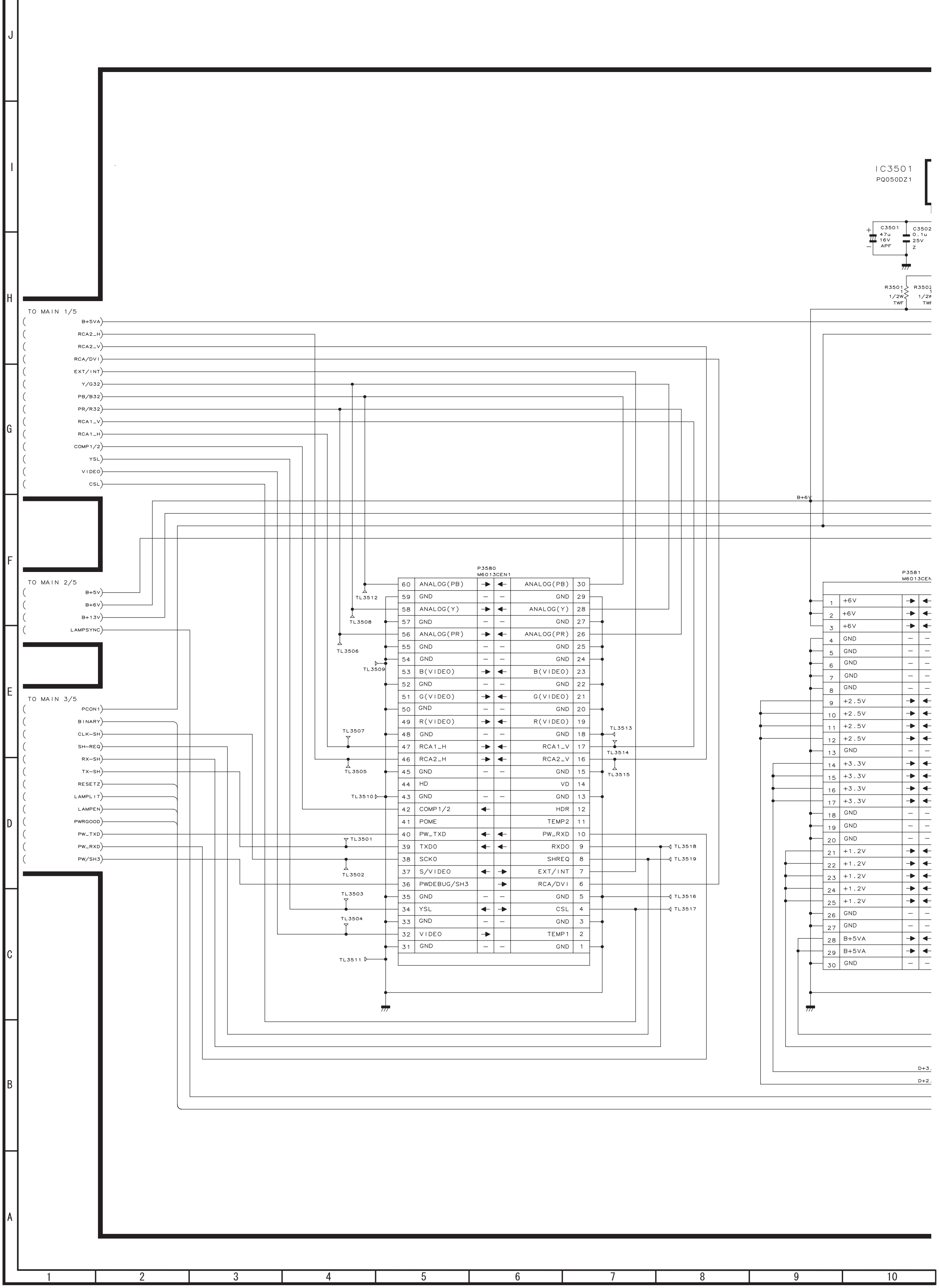
10
Q2817
RDTC144EE
Q2819
RDTC144EE
Q2820
RDTC144EE
Q2821
RDTC144EE
TL2004
TL2006
TL2007
TL2008
R2-LED
R1-LED
B1-LED
POWLED
P2001
N1358RE
KEY
R/C (2)
POWERKEY
KEY3
KEY2
KEY1
BU+3.3V
BU+5V
POWER-LED
STANBY-LED
B-LED
R-LED
TEMP-LED
GND
TL2003
TL2013
TL2009
TL2010
TL2011
TL2012
TL2001
TL2002
TL2014
FB2841
A053WJ
FB2004
A191WJ
FB2005
A191WJ
STANDBYLED
B+5V
TL2015
TL2016
Q2004
RN4904
Q2002
RN4982
BU+5V
R2010
3.9
1/10W
C2012
100u
16V
APF
R2012
10K
BU+5VR2010
IC2002
MM1573DN
ON/OFF
VIN
GND
NC
VOUT
C2013
0.01u
TL2017
C2014
100u
16V
APF
C2015
0.1u
25V
Z
BU+3.3V
R2078
82K
TO MAIN 2/5
B+5V
BU+5V
BU+3.3V
PCON12
R/C1
LAMPFLAG
LAMPPOW
LAMP-HALF
OL-12V
PCON0
FANLOCK
FPWM1
FPWM2
TEMP1
TEMP2
TEMP3
DET-3.3V
WRC
RC
LAMPEN
RX
TX
FANSP_PO0
FANSP_PO1
FANSP_DAC0
FANSP_DAC1
KEY3
KEY2
KEY1
R2075
10K
C2027
0.1u
C2028
0.1u
C2029
0.1u
C2004
0.1u
25V
Z
IC2009
TC7SH08U
VCC
Y
A
B
GND
R2023
0
R2024
0
PW_RXD
PW_TXD
R2025
100
TL2019
TL2020
R2015
0
R2016
0
RXD
TXD
75
NC
76
77
78
79
PO7
80
PO6
81
PO5
82
PO4
83
PO3
84
PO2
85
PO1
86
PO0
87
88
89
90
91
92
93
94
AVSS
95
96
VREF
97
AVCC
98
99
100
DA1
C2003
100u
16V
APF
C2006
0.1u
25V
R2017
10K
IC2001
ISL83220
SHDN
VCC
GND
EN
C1+
V+
C1-
C2+
C2-
V-
R2020
0
C2002
0.1u Z
25V
C2005
0.1u Z
25V
C2008
0.1u
25V Z
C2010
0.1u Z
25V
R2022
6.8K
C2007
0.1u
25V
Z
IC2010
TC7SZ08U
R2032
0
R2033
10K
IC2006
PST600IM
OUT
R2043
33K
C2021
0.1u
25V
R2070
100
D2022
BAS316
TL2018
IC2004
TC7W32U
R2031
10K
TL2022
IC2003
TC7W53U
C2016
1000P
Q2001
HN2A01FU
R2039
6.8K
R2018
15K
C2017
0.1u
25V
Z
R2013
150K
FANSP_DAC1


DUNTKD852WE
R2-LED
B1-LED
R1-LED
POWLED
STANDBYLED
BU+3.3V
R2041
100
R2047
100
Q2013
RDTC144EE
R2058
100K
SW2002
K0099TA
TL2021
IC2005
IXB838WJ
SUB MICON
VSS
VCC
LIGHT-LED
R1-LED
R2-LED
B1-LED
POW-LED
STBY-LED
FAN-LOCK
SW
12V-OL
DET-3.3V
CE
PCON0
PCON1
LAMP-POW
LAMP-FLAG
LAMP-HALF
12VOUT-CON
BINARY
RXD
TXD
CLK-SH
RX-SH
TX-SH
SDA
SCL
LAMPEN
SH-REQ
PWRGOOD
RESETZ
NC
PO7
PO6
PO5
PO4
PO3
PO2
PO1
PO0
KEY3
KEY2
KEY1
TEMP3
TEMP2
TEMP1
AVSS
VREF
AVCC
DA1
DA0
PWC
BYTE
CNVSS
XCIN
XCOUT
RESET
XOUT
XIN
NM1
POW-KEY
INT1
R/C
232CON
FPNM1
FPNM2
LAMPLIT
R2068
100
R2049
100
R2076
10K
R2053
100
R2061
10K
R2011
47K
D2024
EX0259TA
R2056
470
R2057 10
R2050
100
R2051
10
R2054
10
R2072
10K
R2026
10K
R2073
82K
LAMPPOW
LAMPFLAG
LAMP-HALF
PCON12
R2060
150
IC2007
BR24L02M
R2066
10
R2067
100
R2081
10
R2071
10K
R2038
1K
R2040
10K
R2028
10
R2029
10
R2031
10K
TL2022
X2001
SB0286CE
C2018
22P
(CH)
C2019
22P
(CH)
C2020
0.1u
25V
C2022
0.1u
25V
Z
C2023
0.1u
25V
Z
C2024
100u
16V
APF
R2074
47K
FB2003
A191WJ
RESETZ
LAMPLIT
LAMPEN
PWRGOOD
FANSP_DAC1
FANSP_DAC0
FPWM1
FPWM2
TO MAIN 4/5
BINARY
CLK-SH
SH-REQ
RX-SH
TX-SH
RESETZ
LAMPLIT
LAMPEN
PWRGOOD
PW_RXD
PW_TXD
PW/SH3
PCON1
TO MAIN 5/5
PCON1
D+3.3V
3.3
0
11
12
13
14
15
16
17
18
19

■MAIN Unit-4


J
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6
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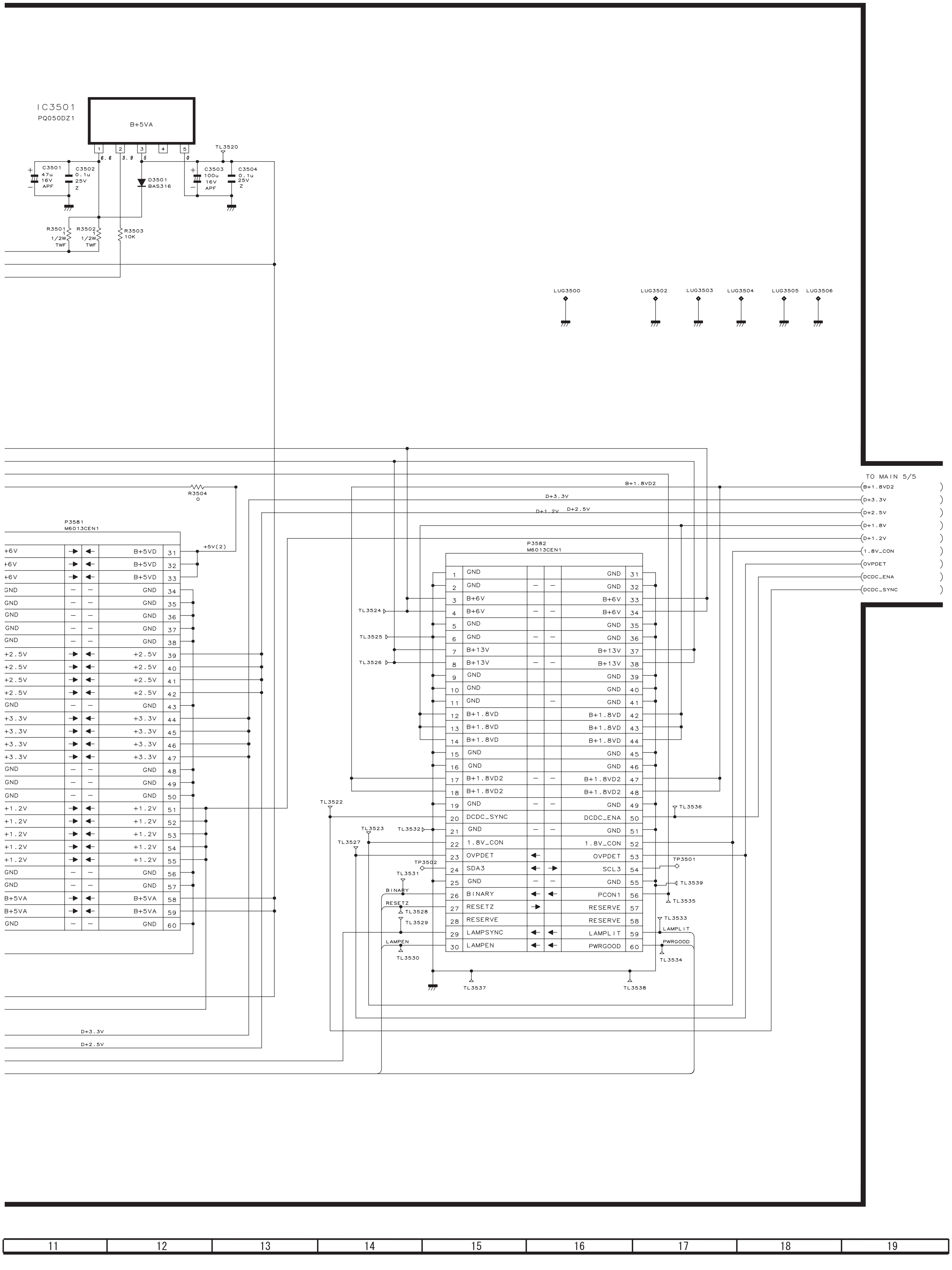
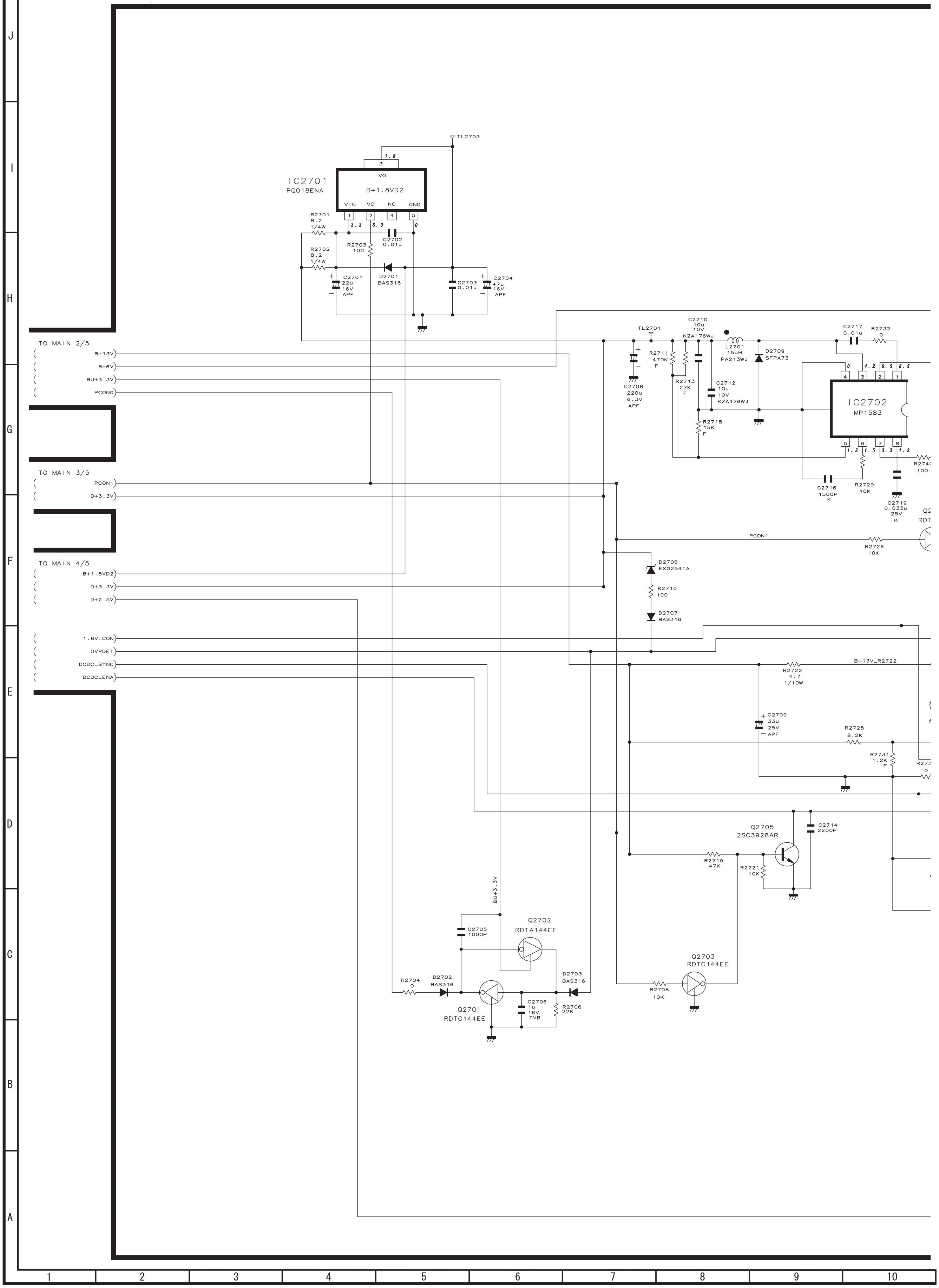
10
TO MAIN 1/5
B+5VA
RCA2_H
RCA2_V
RCA/DVI
EXT/INT
Y/G32
PB/B32
PR/R32
RCA1_V
RCA1_H
COMP1/2
YSL
VIDEO
CSL
TO MAIN 2/5
B+5V
B+6V
B+13V
LAMPSYNC
TO MAIN 3/5
PCON1
BINARY
CLK-SH
SH-REQ
RX-SH
TX-SH
RESETZ
LAMPLIT
LAMPEN
PWRGOOD
PW_TXD
PW_RXD
PW/SH3
IC3501
PQ050DZ1
C3501
47u
16V
APF
C3502
0.1u
25V
Z
R3501
1/2W
TWF
R3502
1/2W
TWF
B+6V
P3580
M6013CEN1
60 ANALOG(PB) ANALOG(PB) 30
59 GND GND 29
58 ANALOG(Y) ANALOG(Y) 28
57 GND GND 27
56 ANALOG(PR) ANALOG(PR) 26
55 GND GND 25
54 GND GND 24
53 B(VIDEO) B(VIDEO) 23
52 GND GND 22
51 G(VIDEO) G(VIDEO) 21
50 GND GND 20
49 R(VIDEO) R(VIDEO) 19
48 GND GND 18
47 RCA1_H RCA1_V 17
46 RCA2_H RCA2_V 16
45 GND GND 15
44 HD VD 14
43 GND GND 13
42 COMP1/2 HDR 12
41 POME TEMP2 11
40 PW_TXD PW_RXD 10
39 TXD0 RXD0 9
38 SCK0 SHREQ 8
37 S/VIDEO EXT/INT 7
36 PWDEBUG/SH3 RCA/DVI 6
35 GND GND 5
34 YSL CSL 4
33 GND GND 3
32 VIDEO TEMP1 2
31 GND GND 1
TL3501
TL3502
TL3503
TL3504
TL3505
TL3506
TL3507
TL3508
TL3509
TL3510
TL3511
TL3512
TL3513
TL3514
TL3515
TL3516
TL3517
TL3518
TL3519
P3581
M6013CEN
1 +6V
2 +6V
3 +6V
4 GND
5 GND
6 GND
7 GND
8 GND
9 +2.5V
10 +2.5V
11 +2.5V
12 +2.5V
13 GND
14 +3.3V
15 +3.3V
16 +3.3V
17 +3.3V
18 GND
19 GND
20 GND
21 +1.2V
22 +1.2V
23 +1.2V
24 +1.2V
25 +1.2V
26 GND
27 GND
28 B+5VA
29 B+5VA
30 GND
D+3.
D+2.


IC3501
PQ050DZ1
B+5VA
6.6
3.9
5
0
TL3520
C3501 47u 16V APF
C3502 0.1u 25V Z
D3501 BAS316
C3503 100u 16V APF
C3504 0.1u 25V Z
R3501 1 1/2W TWF
R3502 1 1/2W TWF
R3503 10K
LUG3500
LUG3502
LUG3503
LUG3504
LUG3505
LUG3506
R3504 0
+5V(2)
P3581
M6013CEN1
B+5VD
GND
+2.5V
+3.3V
+1.2V
B+5VA
P3582
M6013CEN1
GND
B+6V
B+13V
B+1.8VD
B+1.8VD2
DCDC_SYNC
1.8V_CON
OVPDET
SDA3
SCL3
BINARY
RESETZ
RESERVE
LAMPSYNC
LAMPEN
DCDC_ENA
PCON1
LAMPLIT
PWRGOOD
TL3522
TL3523
TL3524
TL3525
TL3526
TL3527
TL3528
TL3529
TL3530
TL3531
TL3532
TL3533
TL3534
TL3535
TL3536
TL3537
TL3538
TL3539
TP3501
TP3502
B+1.8VD2
D+3.3V
D+1.2V
D+2.5V
TO MAIN 5/5
B+1.8VD2
D+3.3V
D+2.5V
D+1.8V
D+1.2V
1.8V_CON
OVPDET
DCDC_ENA
DCDC_SYNC
11
12
13
14
15
16
17
18
19

■MAIN Unit-5


J
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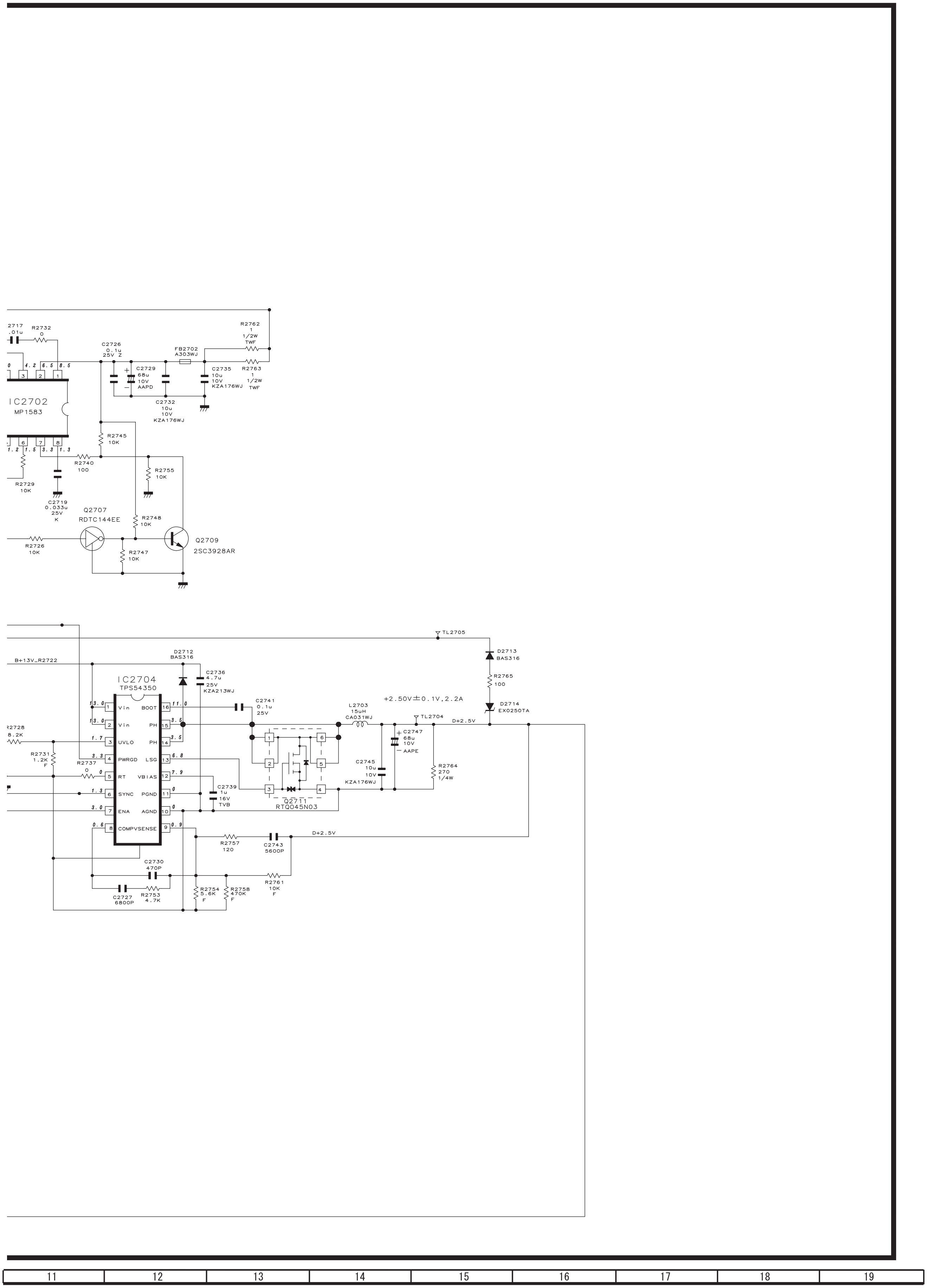
7
8
9
10
TL2703
1.8
3
VO
IC2701
PQ018ENA
B+1.8VD2
VIN
VC
NC
GND
1
2
4
5
R2701
8.2
1/4W
3.3
5.0
0
C2702
0.01u
R2703
100
R2702
8.2
1/4W
C2701
22u
16V
APF
D2701
BAS316
C2703
0.01u
C2704
47u
16V
APF
TO MAIN 2/5
B+13V
B+6V
BU+3.3V
PCON0
TO MAIN 3/5
PCON1
D+3.3V
TO MAIN 4/5
B+1.8VD2
D+3.3V
D+2.5V
1.8V_CON
OVPDET
DCDC_SYNC
DCDC_ENA
TL2701
C2708
220u
6.3V
APF
R2711
470K
F
R2713
27K
F
C2710
10u
10V
KZA176WJ
C2712
10u
10V
KZA176WJ
R2718
15K
F
L2701
15uH
PA213WJ
D2709
SFPA73
C2717
0.01u
R2732
0
0
4.2
6.5
8.5
4
3
2
1
IC2702
MP1583
5
6
7
8
1.2
1.5
3.3
1.3
R2740
100
C2716
1500P
K
R2729
10K
C2719
0.033u
25V
K
Q2
RDT
PCON1
R2726
10K
D2706
EX0254TA
R2710
100
D2707
BAS316
R2722
4.7
1/10W
B+13V_R2722
C2709
33u
25V
APF
R2728
8.2K
R2731
1.2K
F
R273
0
Q2705
2SC3928AR
C2714
2200P
R2715
47K
R2721
10K
BU+3.3V
C2705
1000P
Q2702
RDTA144EE
R2704
0
D2702
BAS316
Q2701
RDTC144EE
C2706
1u
16V
TVB
R2706
22K
D2703
BAS316
Q2703
RDTC144EE
R2708
10K


R2762 1 1/2W TWF
R2763 1 1/2W TWF
R2732 0
C2726 0.1u 25V Z
C2729 68u 10V AAPD
FB2702 A303WJ
C2735 10u 10V KZA176WJ
C2732 10u 10V KZA176WJ
IC2702 MP1583
R2745 10K
R2740 100
R2755 10K
R2729 10K
C2719 0.033u 25V K
Q2707 RDTC144EE
R2748 10K
Q2709 2SC3928AR
R2726 10K
R2747 10K
TL2705
D2713 BAS316
R2765 100
D2714 EX0250TA
B+13V_R2722
D2712 BAS316
C2736 4.7u 25V KZA213WJ
IC2704 TPS54350
Vin
BOOT
PH
UVLO
PWRGD
LSG
RT
VBIAS
SYNC
PGND
ENA
AGND
COMP
VSENSE
C2741 0.1u 25V
L2703 15uH CA031WJ
+2.50V±0.1V,2.2A
TL2704
D+2.5V
C2747 68u 10V AAPE
R2764 270 1/4W
C2745 10u 10V KZA176WJ
R2728 8.2K
R2731 1.2K F
R2737 0
C2739 1u 16V TVB
Q2711 RTQ045N03
R2757 120
C2743 5600P
C2730 470P
R2761 10K F
C2727 6800P
R2753 4.7K
R2754 5.6K F
R2758 470K F
11
12
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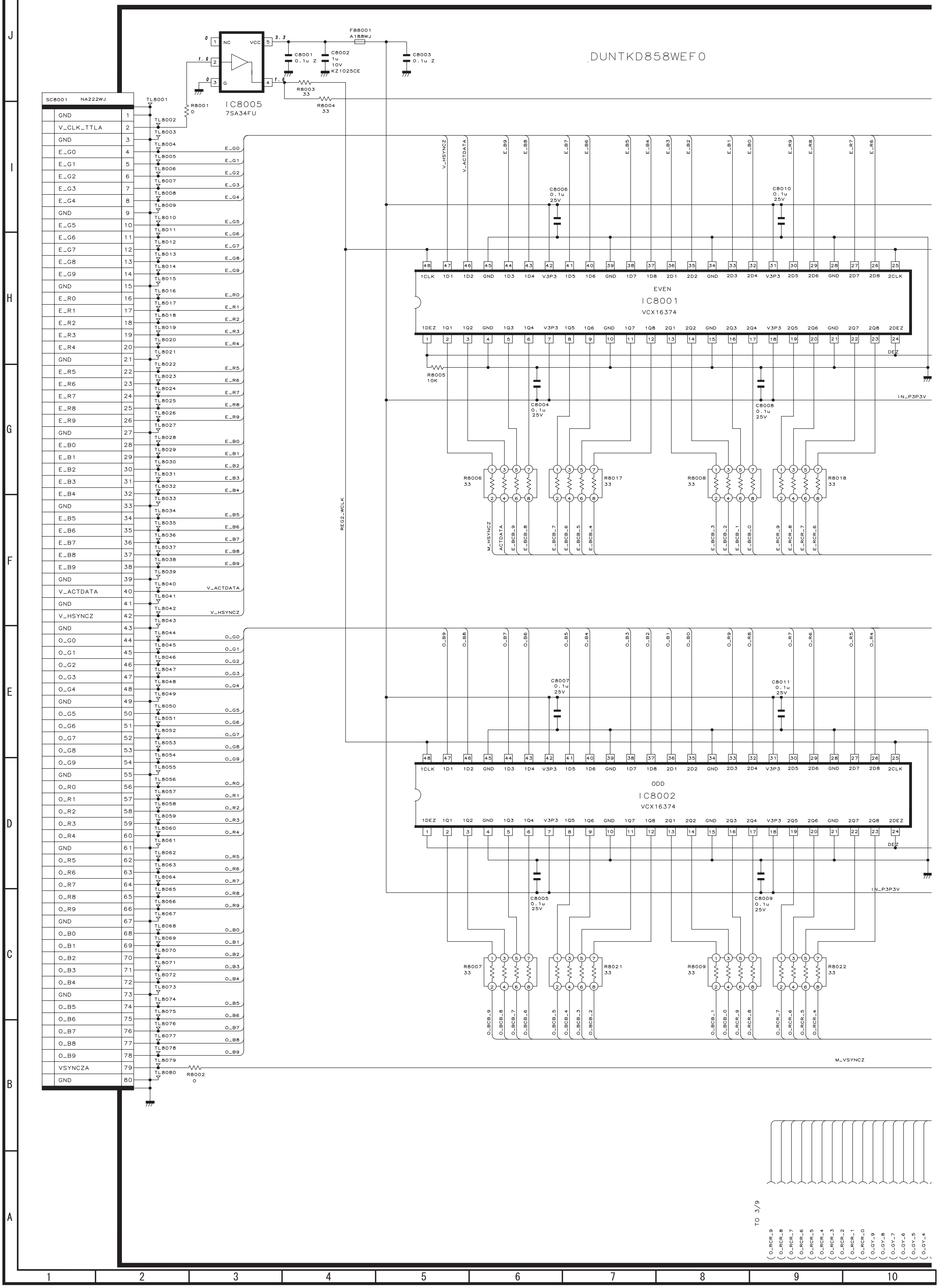
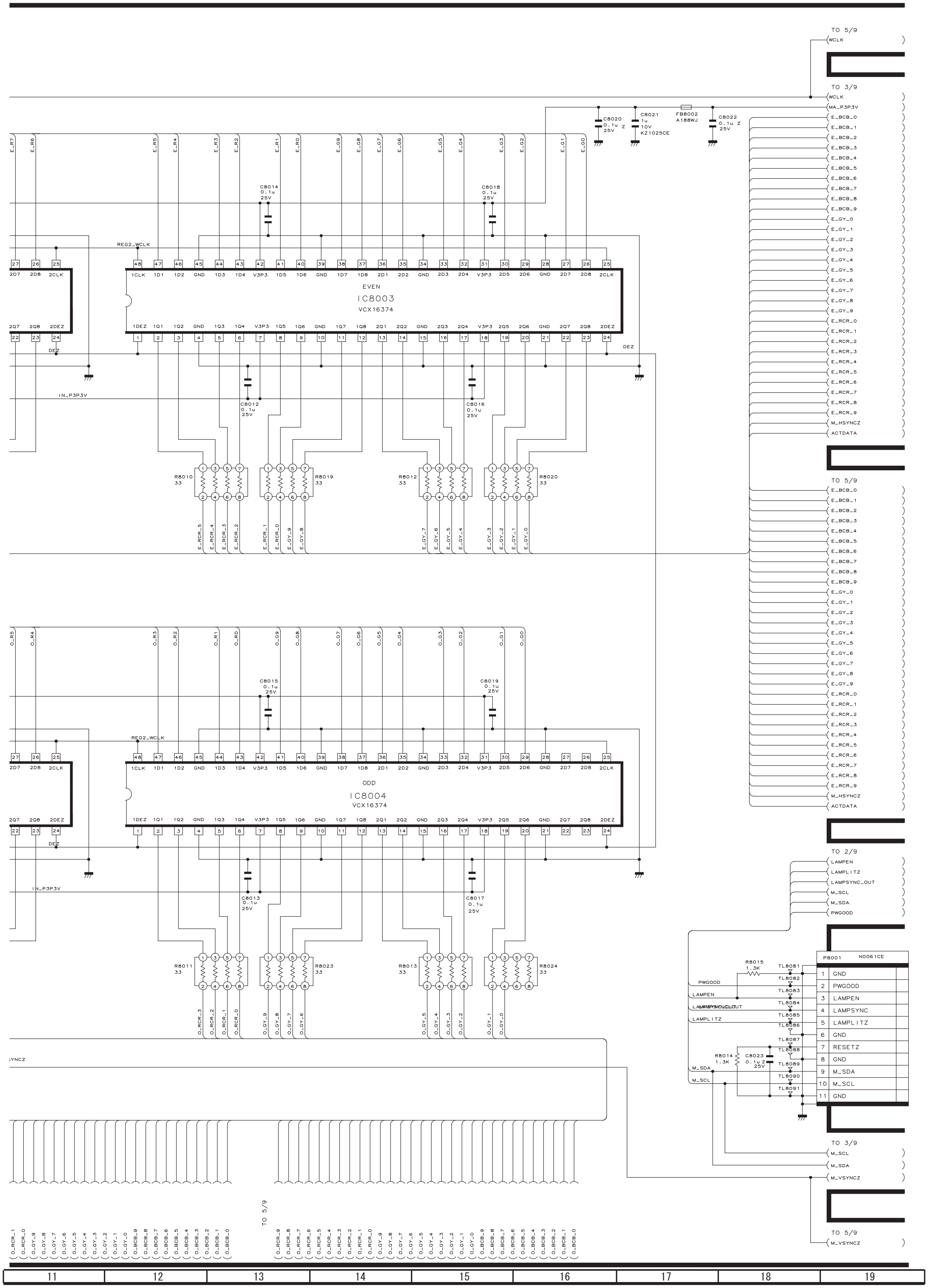
■FORMATTER Unit-1


DUNTKD858WEF0
SC8001 NA222WJ
GND 1
V_CLK_TTLA 2
GND 3
E_G0 4
E_G1 5
E_G2 6
E_G3 7
E_G4 8
GND 9
E_G5 10
E_G6 11
E_G7 12
E_G8 13
E_G9 14
GND 15
E_R0 16
E_R1 17
E_R2 18
E_R3 19
E_R4 20
GND 21
E_R5 22
E_R6 23
E_R7 24
E_R8 25
E_R9 26
GND 27
E_B0 28
E_B1 29
E_B2 30
E_B3 31
E_B4 32
GND 33
E_B5 34
E_B6 35
E_B7 36
E_B8 37
E_B9 38
GND 39
V_ACTDATA 40
GND 41
V_HSYNCZ 42
GND 43
O_G0 44
O_G1 45
O_G2 46
O_G3 47
O_G4 48
GND 49
O_G5 50
O_G6 51
O_G7 52
O_G8 53
O_G9 54
GND 55
O_R0 56
O_R1 57
O_R2 58
O_R3 59
O_R4 60
GND 61
O_R5 62
O_R6 63
O_R7 64
O_R8 65
O_R9 66
GND 67
O_B0 68
O_B1 69
O_B2 70
O_B3 71
O_B4 72
GND 73
O_B5 74
O_B6 75
O_B7 76
O_B8 77
O_B9 78
VSYNCZA 79
GND 80
TL8001 – TL8080
IC8005 7SA34FU
NC VCC G
R8001 0
R8002 0
R8003 33
R8004 33
C8001 0.1u Z
C8002 1u 10V KZ1025CE
C8003 0.1u Z
FB8001 A188WJ
REG2_WCLK
EVEN
IC8001 VCX16374
ODD
IC8002 VCX16374
1CLK 1D1 1D2 GND 1D3 1D4 V3P3 1D5 1D6 GND 1D7 1D8 2D1 2D2 GND 2D3 2D4 V3P3 2D5 2D6 GND 2D7 2D8 2CLK
1DEZ 1Q1 1Q2 GND 1Q3 1Q4 V3P3 1Q5 1Q6 GND 1Q7 1Q8 2Q1 2Q2 GND 2Q3 2Q4 V3P3 2Q5 2Q6 GND 2Q7 2Q8 2DEZ
DEZ
R8005 10K
C8004 0.1u 25V
C8005 0.1u 25V
C8006 0.1u 25V
C8007 0.1u 25V
C8008 0.1u 25V
C8009 0.1u 25V
C8010 0.1u 25V
C8011 0.1u 25V
IN_P3P3V
R8006 33
R8007 33
R8008 33
R8009 33
R8017 33
R8018 33
R8021 33
R8022 33
M_HSYNCZ ACTDATA E_BCB_9 E_BCB_8 E_BCB_7 E_BCB_6 E_BCB_5 E_BCB_4 E_BCB_3 E_BCB_2 E_BCB_1 E_BCB_0 E_RCR_9 E_RCR_8 E_RCR_7 E_RCR_6
O_BCB_9 O_BCB_8 O_BCB_7 O_BCB_6 O_BCB_5 O_BCB_4 O_BCB_3 O_BCB_2 O_BCB_1 O_BCB_0 O_RCR_9 O_RCR_8 O_RCR_7 O_RCR_6 O_RCR_5 O_RCR_4
M_VSYNCZ
TO 3/9
O_RCR_9 O_RCR_8 O_RCR_7 O_RCR_6 O_RCR_5 O_RCR_4 O_RCR_3 O_RCR_2 O_RCR_1 O_RCR_0 O_GY_9 O_GY_8 O_GY_7 O_GY_6 O_GY_5 O_GY_4
J I H G F E D C B A
1 2 3 4 5 6 7 8 9 10


TO 5/9
WCLK
TO 3/9
WCLK
MA_P3P3V
E_BCB_0
E_BCB_1
E_BCB_2
E_BCB_3
E_BCB_4
E_BCB_5
E_BCB_6
E_BCB_7
E_BCB_8
E_BCB_9
E_GY_0
E_GY_1
E_GY_2
E_GY_3
E_GY_4
E_GY_5
E_GY_6
E_GY_7
E_GY_8
E_GY_9
E_RCR_0
E_RCR_1
E_RCR_2
E_RCR_3
E_RCR_4
E_RCR_5
E_RCR_6
E_RCR_7
E_RCR_8
E_RCR_9
M_HSYNCZ
ACTDATA
C8020
0.1u Z
25V
C8021
1u
10V
KZ1025CE
FB8002
A188WJ
C8022
0.1u Z
25V
C8014
0.1u
25V
C8018
0.1u
25V
REG2_WCLK
EVEN
IC8003
VCX16374
DEZ
IN_P3P3V
C8012
0.1u
25V
C8016
0.1u
25V
R8010
33
R8019
33
R8012
33
R8020
33
E_R7
E_R6
E_R5
E_R4
E_R3
E_R2
E_R1
E_R0
E_G9
E_G8
E_G7
E_G6
E_G5
E_G4
E_G3
E_G2
E_G1
E_G0
1CLK
1D1
1D2
GND
1D3
1D4
V3P3
1D5
1D6
1D7
1D8
2D1
2D2
2D3
2D4
2D5
2D6
2D7
2D8
2CLK
1DEZ
1Q1
1Q2
1Q3
1Q4
1Q5
1Q6
1Q7
1Q8
2Q1
2Q2
2Q3
2Q4
2Q5
2Q6
2Q7
2Q8
2DEZ
O_R5
O_R4
O_R3
O_R2
O_R1
O_R0
O_G9
O_G8
O_G7
O_G6
O_G5
O_G4
O_G3
O_G2
O_G1
O_G0
C8015
0.1u
25V
C8019
0.1u
25V
ODD
IC8004
VCX16374
C8013
0.1u
25V
C8017
0.1u
25V
R8011
33
R8023
33
R8013
33
R8024
33
O_RCR_3
O_RCR_2
O_RCR_1
O_RCR_0
O_GY_9
O_GY_8
O_GY_7
O_GY_6
O_GY_5
O_GY_4
O_GY_3
O_GY_2
O_GY_1
O_GY_0
TO 2/9
LAMPEN
LAMPLITZ
LAMPSYNC_OUT
M_SCL
M_SDA
PWGOOD
R8015
1.3K
R8014
1.3K
C8023
0.1u Z
25V
TL8081
TL8082
TL8083
TL8084
TL8085
TL8086
TL8087
TL8088
TL8089
TL8090
TL8091
P8001
N0061CE
1 GND
2 PWGOOD
3 LAMPEN
4 LAMPSYNC
5 LAMPLITZ
6 GND
7 RESETZ
8 GND
9 M_SDA
10 M_SCL
11 GND
TO 3/9
M_SCL
M_SDA
M_VSYNCZ
TO 5/9
M_VSYNCZ
O_RCR_1
O_RCR_0
O_GY_9
O_GY_8
O_GY_7
O_GY_6
O_GY_5
O_GY_4
O_GY_3
O_GY_2
O_GY_1
O_GY_0
O_BCB_9
O_BCB_8
O_BCB_7
O_BCB_6
O_BCB_5
O_BCB_4
O_BCB_3
O_BCB_2
O_BCB_1
O_BCB_0
O_RCR_9
O_RCR_8
O_RCR_7
O_RCR_6
O_RCR_5
O_RCR_4
O_RCR_3
O_RCR_2
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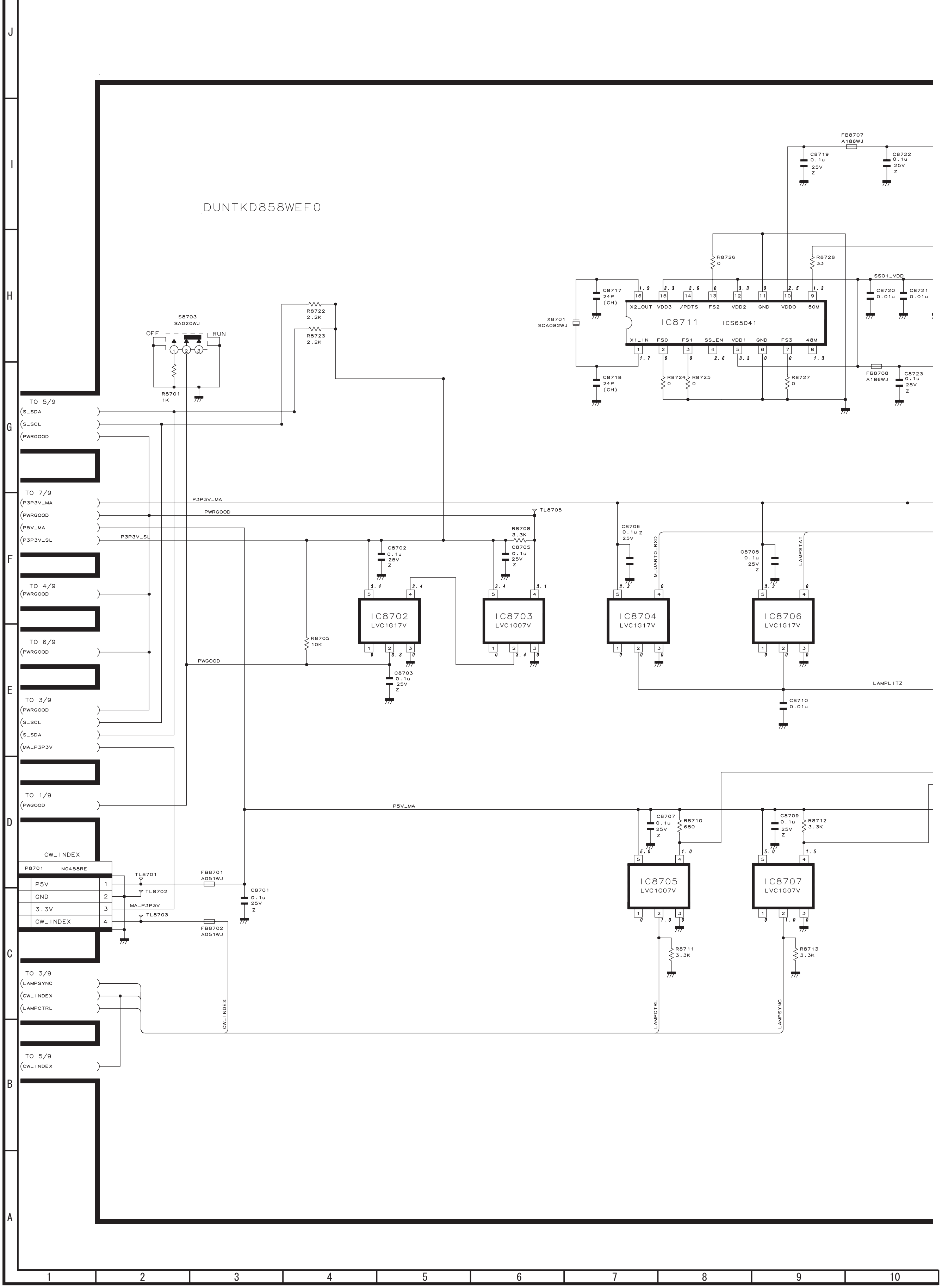
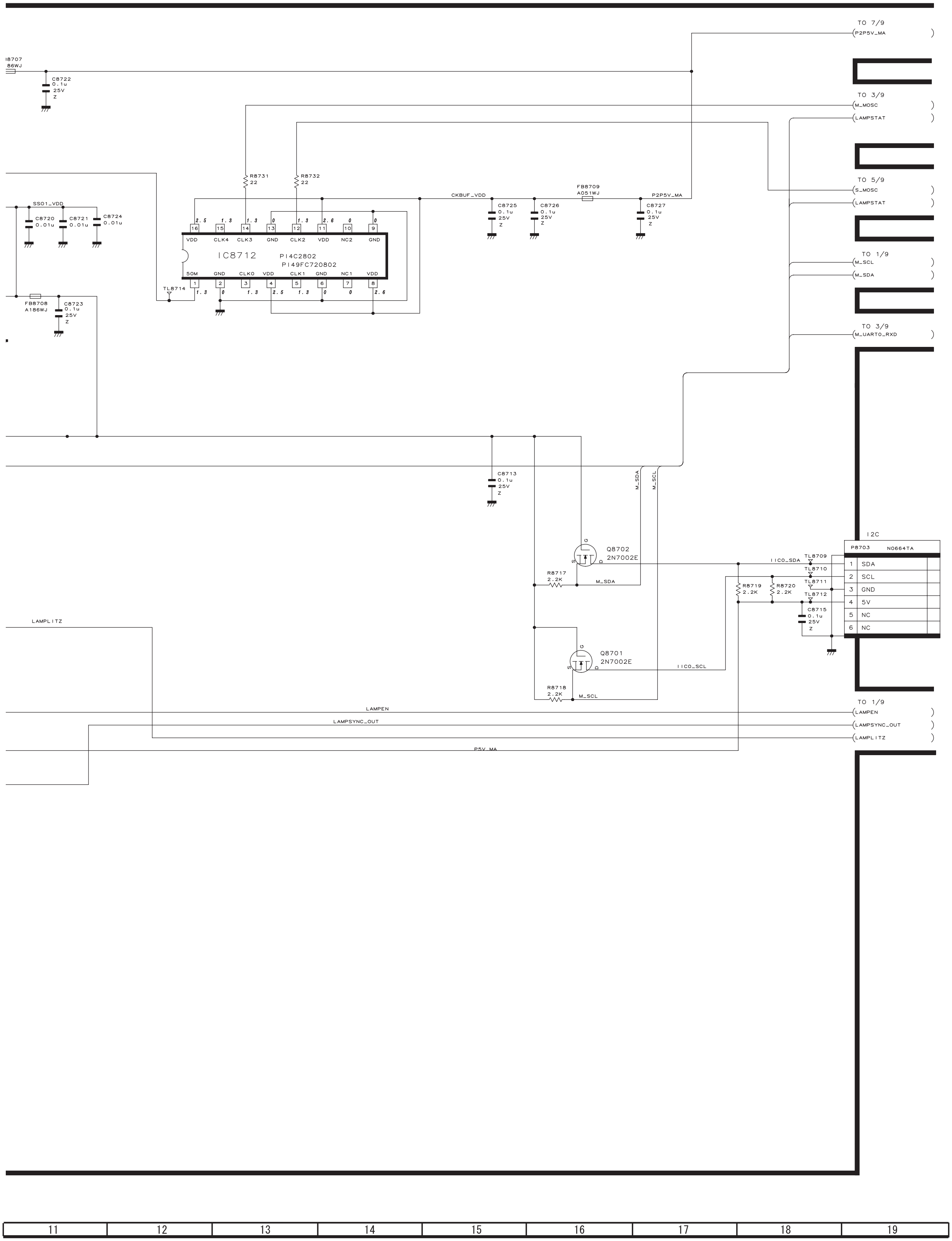
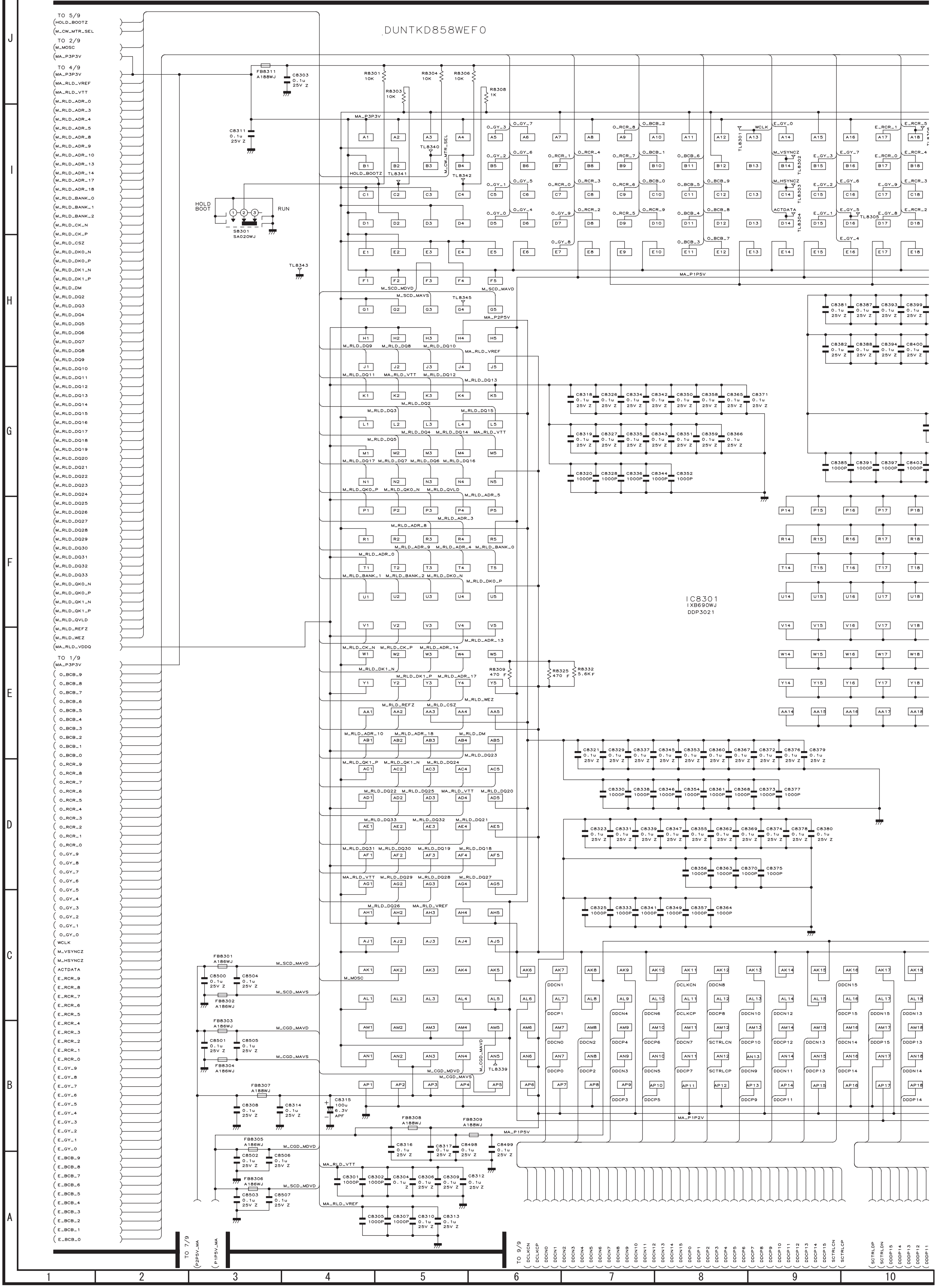
■FORMATTER Unit-2


DUNTKD858WEF0
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC8711
ICS65041
X2_OUT
VDD3
/PDTS
FS2
VDD2
GND
VDDO
50M
X1_IN
FS0
FS1
SS_EN
VDD1
GND
FS3
48M
X8701
SCA082WJ
C8717
24P
(CH)
C8718
24P
(CH)
R8726
0
R8728
33
R8724
0
R8725
0
R8727
0
C8719
0.1u
25V
Z
FB8707
A186WJ
C8722
0.1u
25V
Z
SS01_VDD
C8720
0.01u
C8721
0.01u
FB8708
A186WJ
C8723
0.1u
25V
Z
S8703
SA020WJ
OFF
RUN
R8701
1K
R8722
2.2K
R8723
2.2K
TO 5/9
S_SDA
S_SCL
PWRGOOD
TO 7/9
P3P3V_MA
PWRGOOD
P5V_MA
P3P3V_SL
TO 4/9
PWRGOOD
TO 6/9
PWRGOOD
TO 3/9
PWRGOOD
S_SCL
S_SDA
MA_P3P3V
TO 1/9
PWGOOD
P3P3V_MA
PWRGOOD
P3P3V_SL
TL8705
R8708
3.3K
C8702
0.1u
25V
Z
C8705
0.1u
25V
Z
C8706
0.1u Z
25V
M_UART0_RXD
C8708
0.1u
25V
Z
LAMPSTAT
IC8702
LVC1G17V
IC8703
LVC1G07V
IC8704
LVC1G17V
IC8706
LVC1G17V
R8705
10K
PWGOOD
C8703
0.1u
25V
Z
C8710
0.01u
LAMPLITZ
P5V_MA
C8707
0.1u
25V
Z
R8710
680
C8709
0.1u
25V
Z
R8712
3.3K
IC8705
LVC1G07V
IC8707
LVC1G07V
R8711
3.3K
R8713
3.3K
CW_INDEX
P8701
N0458RE
P5V
GND
3.3V
CW_INDEX
TL8701
TL8702
MA_P3P3V
TL8703
FB8701
A051WJ
FB8702
A051WJ
C8701
0.1u
25V
Z
TO 3/9
LAMPSYNC
CW_INDEX
LAMPCTRL
TO 5/9
CW_INDEX
LAMPCTRL
LAMPSYNC
CW_INDEX


TO 7/9
P2P5V_MA
8707
86WJ
C8722
0.1u
25V
Z
TO 3/9
M_MOSC
LAMPSTAT
R8731
22
R8732
22
TO 5/9
S_MOSC
LAMPSTAT
SS01_VDD
C8720
0.01u
C8721
0.01u
C8724
0.01u
CKBUF_VDD
C8725
0.1u
25V
Z
C8726
0.1u
25V
Z
FB8709
A051WJ
P2P5V_MA
C8727
0.1u
25V
Z
2.5
1.3
1.3
0
1.3
2.6
0
0
16
15
14
13
12
11
10
9
VDD
CLK4
CLK3
GND
CLK2
VDD
NC2
GND
IC8712
PI4C2802
PI49FC720802
50M
GND
CLK0
VDD
CLK1
GND
NC1
VDD
1
2
3
4
5
6
7
8
1.3
0
1.3
2.5
1.3
0
0
2.6
TL8714
FB8708
A186WJ
C8723
0.1u
25V
Z
TO 1/9
M_SCL
M_SDA
TO 3/9
M_UART0_RXD
C8713
0.1u
25V
Z
M_SDA
M_SCL
I2C
P8703
N0664TA
Q8702
2N7002E
G
S
D
IIC0_SDA
TL8709
TL8710
TL8711
TL8712
1
SDA
2
SCL
3
GND
4
5V
5
NC
6
NC
R8717
2.2K
M_SDA
R8719
2.2K
R8720
2.2K
C8715
0.1u
25V
Z
LAMPLITZ
Q8701
2N7002E
G
S
D
IIC0_SCL
R8718
2.2K
M_SCL
TO 1/9
LAMPEN
LAMPSYNC_OUT
LAMPLITZ
LAMPEN
LAMPSYNC_OUT
P5V_MA
11
12
13
14
15
16
17
18
19

■FORMATTER Unit-3


DUNTKD858WEF0
TO 5/9
HOLD_BOOTZ
M_CW_MTR_SEL
TO 2/9
M_MOSC
MA_P3P3V
TO 4/9
MA_P3P3V
MA_RLD_VREF
MA_RLD_VTT
M_RLD_ADR_0
M_RLD_ADR_3
M_RLD_ADR_4
M_RLD_ADR_5
M_RLD_ADR_8
M_RLD_ADR_9
M_RLD_ADR_10
M_RLD_ADR_13
M_RLD_ADR_14
M_RLD_ADR_17
M_RLD_ADR_18
M_RLD_BANK_0
M_RLD_BANK_1
M_RLD_BANK_2
M_RLD_CK_N
M_RLD_CK_P
M_RLD_CSZ
M_RLD_DK0_N
M_RLD_DK0_P
M_RLD_DK1_N
M_RLD_DK1_P
M_RLD_DM
M_RLD_DQ2 … M_RLD_DQ33
M_RLD_QK0_N
M_RLD_QK0_P
M_RLD_QK1_N
M_RLD_QK1_P
M_RLD_QVLD
M_RLD_REFZ
M_RLD_WEZ
MA_RLD_VDDQ
TO 1/9
MA_P3P3V
O_BCB_9 … O_BCB_0
O_RCR_9 … O_RCR_0
O_GY_9 … O_GY_0
WCLK
M_VSYNCZ
M_HSYNCZ
ACTDATA
E_RCR_9 … E_RCR_0
E_GY_9 … E_GY_0
E_BCB_9 … E_BCB_0
HOLD BOOT
RUN
S8301
SA020WJ
IC8301
IXB690WJ
DDP3021
MA_P1P5V
MA_P2P5V
MA_P1P2V
M_SCD_MAVD
M_SCD_MAVS
M_SCD_MDVD
M_CGD_MAVD
M_CGD_MAVS
M_CGD_MDVD
MA_RLD_VTT
MA_RLD_VREF
TO 7/9
P2P5V_MA
P1P5V_MA
TO 9/9
DCLKCN
DCLKCP
DDCN0 … DDCN15
DDCP0 … DDCP15
SCTRLCN
SCTRLCP
SCTRLDP
SCTRLDN
DDDP15
DDDP14
DDDP13
DDDP12
DDDP11
1
2
3
4
5
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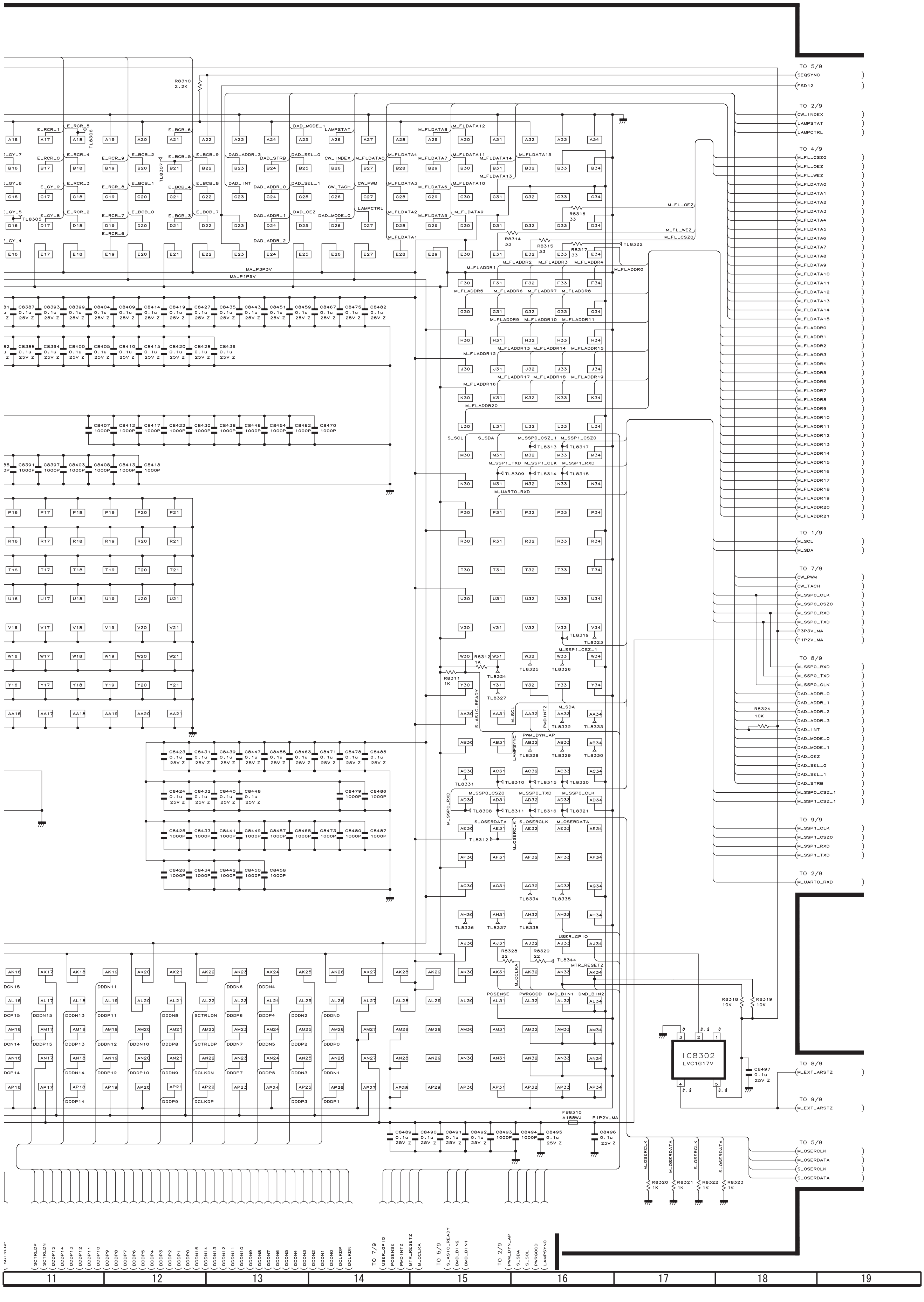
7
8
9
10
J
I
H
G
F
E
D
C
B
A


TO 5/9
SEQSYNC
FSD12
TO 2/9
CW_INDEX
LAMPSTAT
LAMPCTRL
TO 4/9
M_FL_CSZ0
M_FL_OEZ
M_FL_WEZ
M_FLDATA0
M_FLDATA1
M_FLDATA2
M_FLDATA3
M_FLDATA4
M_FLDATA5
M_FLDATA6
M_FLDATA7
M_FLDATA8
M_FLDATA9
M_FLDATA10
M_FLDATA11
M_FLDATA12
M_FLDATA13
M_FLDATA14
M_FLDATA15
M_FLADDR0
M_FLADDR1
M_FLADDR2
M_FLADDR3
M_FLADDR4
M_FLADDR5
M_FLADDR6
M_FLADDR7
M_FLADDR8
M_FLADDR9
M_FLADDR10
M_FLADDR11
M_FLADDR12
M_FLADDR13
M_FLADDR14
M_FLADDR15
M_FLADDR16
M_FLADDR17
M_FLADDR18
M_FLADDR19
M_FLADDR20
M_FLADDR21
TO 1/9
M_SCL
M_SDA
TO 7/9
CW_PWM
CW_TACH
M_SSP0_CLK
M_SSP0_CSZ0
M_SSP0_RXD
M_SSP0_TXD
P3P3V_MA
P1P2V_MA
TO 8/9
M_SSP0_RXD
M_SSP0_TXD
M_SSP0_CLK
DAD_ADDR_0
DAD_ADDR_1
DAD_ADDR_2
DAD_ADDR_3
DAD_INT
DAD_MODE_0
DAD_MODE_1
DAD_OEZ
DAD_SEL_0
DAD_SEL_1
DAD_STRB
M_SSP0_CSZ_1
M_SSP1_CSZ_1
TO 9/9
M_SSP1_CLK
M_SSP1_CSZ0
M_SSP1_RXD
M_SSP1_TXD
TO 2/9
M_UART0_RXD
TO 8/9
M_EXT_ARSTZ
TO 9/9
M_EXT_ARSTZ
TO 5/9
M_OSERCLK
M_OSERDATA
S_OSERCLK
S_OSERDATA
R8310 2.2K
MA_P3P3V
MA_P1P5V
R8324 10K
R8318 10K
R8319 10K
IC8302
LVC1G17V
C8497 0.1u 25V Z
FB8310 A188WJ
P1P2V_MA
R8320 1K
R8321 1K
R8322 1K
R8323 1K
R8311 1K
R8312 1K
R8314 33
R8315 33
R8316 33
R8317 33
R8328 22
R8329 22
USER_GPIO
MTR_RESETZ
POSENSE
PWRGOOD
DMD_BIN1
DMD_BIN2
PWM_DYN_AP
LAMPSYNC
S_ASIC_READY
M_SCL
PMDINTZ
M_OCLK
S_SCL
S_SDA
M_SSP0_CSZ_1
M_SSP1_CSZ0
M_SSP1_TXD
M_SSP1_CLK
M_SSP1_RXD
M_UART0_RXD
M_SSP1_CSZ_1
M_SSP0_CSZ0
M_SSP0_TXD
M_SSP0_CLK
M_SSP0_RXD
S_OSERDATA
S_OSERCLK
M_OSERDATA
M_OSERCLK
SCTRLDP
SCTRLDN
DDDP15
DDDP14
DDDP13
DDDP12
DDDP11
DDDP10
DDDP9
DDDP8
DDDP7
DDDP6
DDDP5
DDDP4
DDDP3
DDDP2
DDDP1
DDDP0
DDDN15
DDDN14
DDDN13
DDDN12
DDDN11
DDDN10
DDDN9
DDDN8
DDDN7
DDDN6
DDDN5
DDDN4
DDDN3
DDDN2
DDDN1
DDDN0
DCLKDP
DCLKDN
TO 7/9
USER_GPIO
POSENSE
PMDINTZ
MTR_RESETZ
M_OCLKA
TO 5/9
S_ASIC_READY
DMD_BIN2
DMD_BIN1
TO 2/9
PWM_DYN_AP
S_SDA
S_SCL
PWRGOOD
LAMPSYNC
11
12
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14
15
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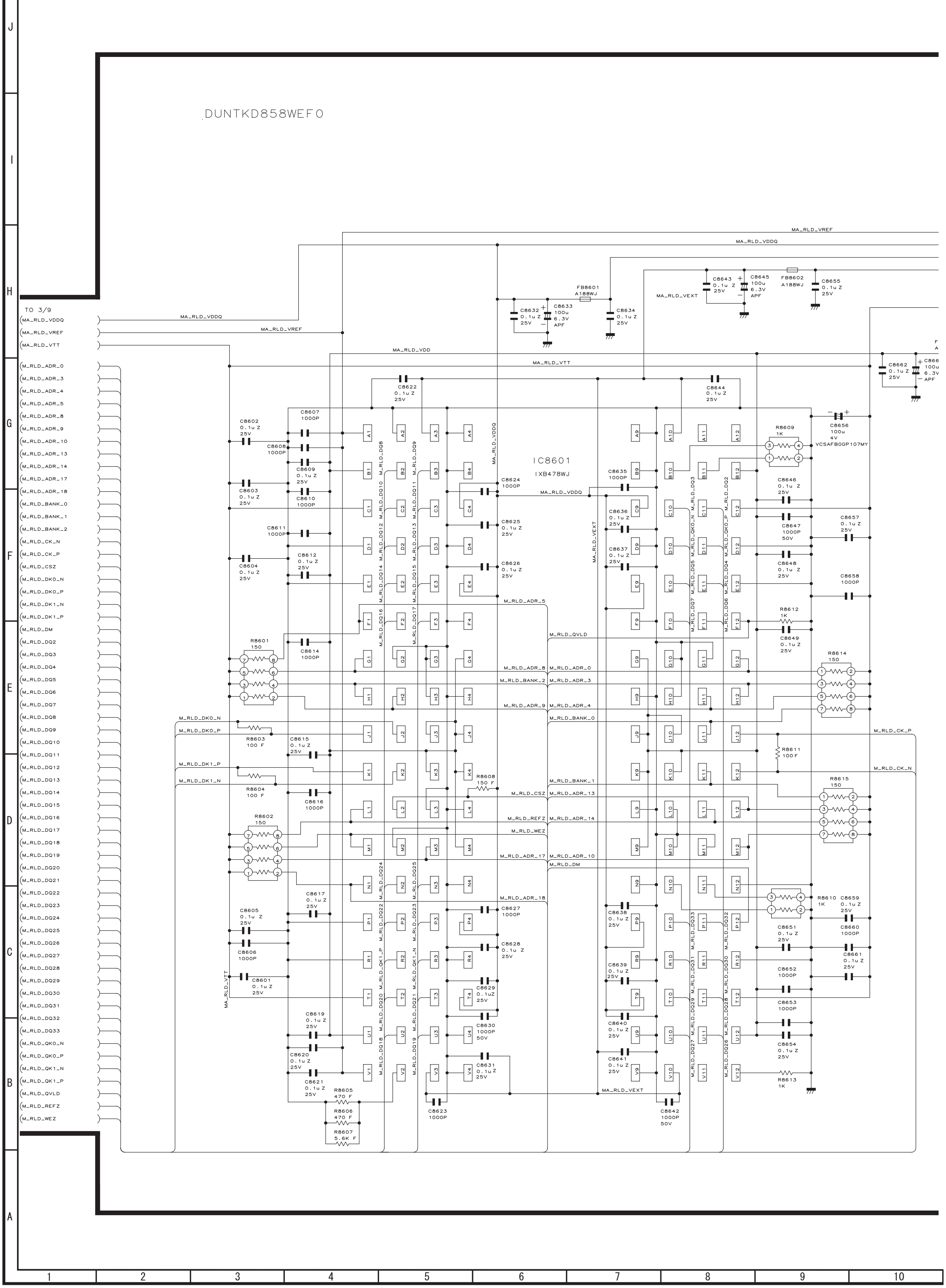
■FORMATTER Unit-4


DUNTKD858WEF0
IC8601
IXB478WJ
TO 3/9
MA_RLD_VDDQ
MA_RLD_VREF
MA_RLD_VTT
MA_RLD_VDD
MA_RLD_VEXT
M_RLD_ADR_0
M_RLD_ADR_3
M_RLD_ADR_4
M_RLD_ADR_5
M_RLD_ADR_8
M_RLD_ADR_9
M_RLD_ADR_10
M_RLD_ADR_13
M_RLD_ADR_14
M_RLD_ADR_17
M_RLD_ADR_18
M_RLD_BANK_0
M_RLD_BANK_1
M_RLD_BANK_2
M_RLD_CK_N
M_RLD_CK_P
M_RLD_CSZ
M_RLD_DK0_N
M_RLD_DK0_P
M_RLD_DK1_N
M_RLD_DK1_P
M_RLD_DM
M_RLD_DQ2
M_RLD_DQ3
M_RLD_DQ4
M_RLD_DQ5
M_RLD_DQ6
M_RLD_DQ7
M_RLD_DQ8
M_RLD_DQ9
M_RLD_DQ10
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M_RLD_DQ14
M_RLD_DQ15
M_RLD_DQ16
M_RLD_DQ17
M_RLD_DQ18
M_RLD_DQ19
M_RLD_DQ20
M_RLD_DQ21
M_RLD_DQ22
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M_RLD_DQ24
M_RLD_DQ25
M_RLD_DQ26
M_RLD_DQ27
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M_RLD_DQ30
M_RLD_DQ31
M_RLD_DQ32
M_RLD_DQ33
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M_RLD_QK0_P
M_RLD_QK1_N
M_RLD_QK1_P
M_RLD_QVLD
M_RLD_REFZ
M_RLD_WEZ
FB8601 A188WJ
FB8602 A188WJ
C8656 100u 4V VCSAFB0GP107MY
R8601 150
R8602 150
R8603 100 F
R8604 100 F
R8605 470 F
R8606 470 F
R8607 5.6K F
R8608 150 F
R8609 1K
R8610 1K
R8611 100 F
R8612 1K
R8613 1K
R8614 150
R8615 150
J
I
H
G
F
E
D
C
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A
1
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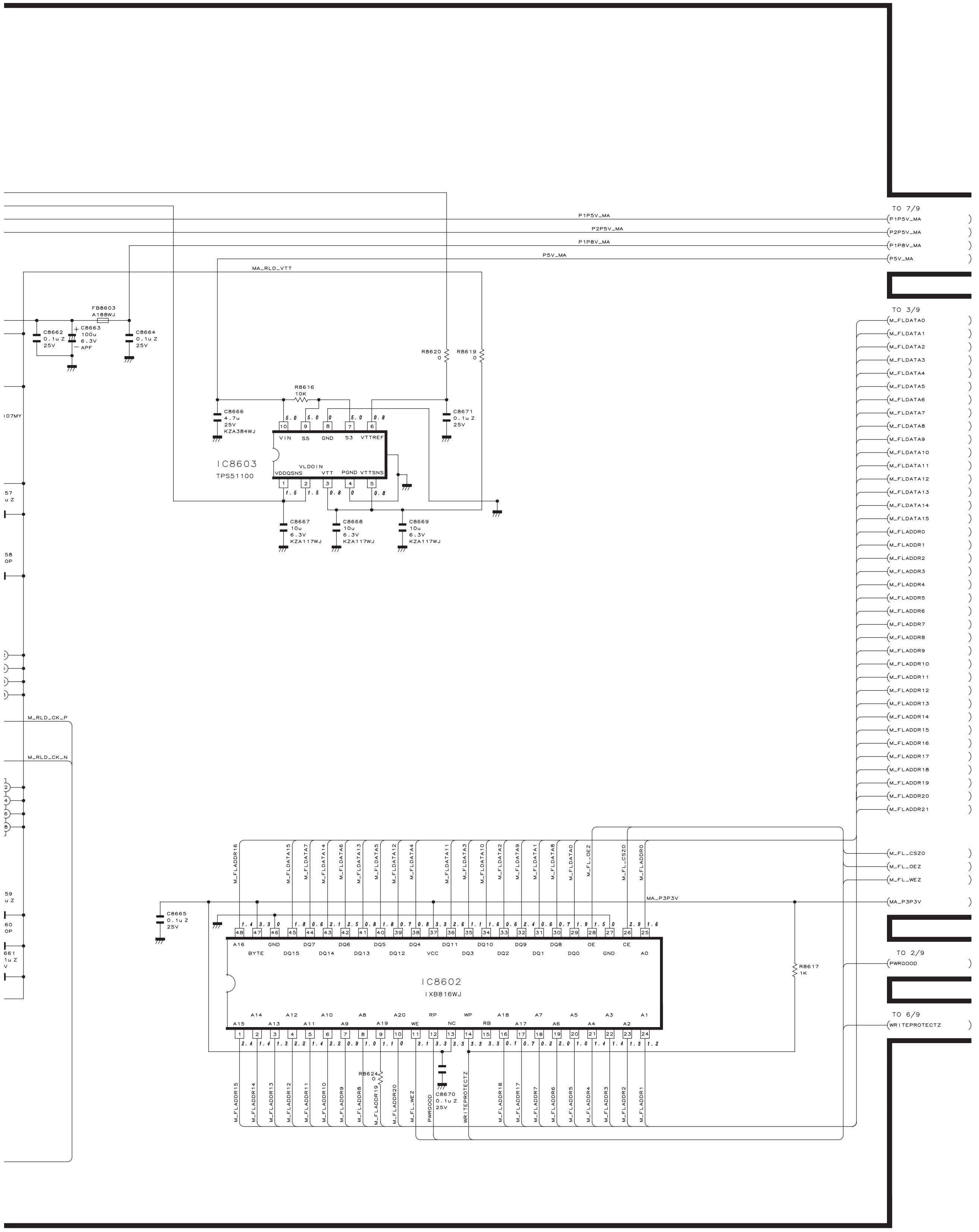
TO 7/9
P1P5V_MA
P2P5V_MA
P1P8V_MA
P5V_MA
MA_RLD_VTT
FB8603
A188WJ
C8662
0.1u Z
25V
C8663
100u
6.3V
APF
C8664
0.1u Z
25V
R8620
0
R8619
0
R8616
10K
C8666
4.7u
25V
KZA384WJ
C8671
0.1u Z
25V
IC8603
TPS51100
VIN
S5
GND
S3
VTTREF
VLDOIN
VDDQSNS
VTT
PGND
VTTSNS
C8667
10u
6.3V
KZA117WJ
C8668
10u
6.3V
KZA117WJ
C8669
10u
6.3V
KZA117WJ
M_RLD_CK_P
M_RLD_CK_N
TO 3/9
M_FLDATA0
M_FLDATA1
M_FLDATA2
M_FLDATA3
M_FLDATA4
M_FLDATA5
M_FLDATA6
M_FLDATA7
M_FLDATA8
M_FLDATA9
M_FLDATA10
M_FLDATA11
M_FLDATA12
M_FLDATA13
M_FLDATA14
M_FLDATA15
M_FLADDR0
M_FLADDR1
M_FLADDR2
M_FLADDR3
M_FLADDR4
M_FLADDR5
M_FLADDR6
M_FLADDR7
M_FLADDR8
M_FLADDR9
M_FLADDR10
M_FLADDR11
M_FLADDR12
M_FLADDR13
M_FLADDR14
M_FLADDR15
M_FLADDR16
M_FLADDR17
M_FLADDR18
M_FLADDR19
M_FLADDR20
M_FLADDR21
M_FL_CSZ0
M_FL_OEZ
M_FL_WEZ
MA_P3P3V
TO 2/9
PWRGOOD
TO 6/9
WRITEPROTECTZ
C8665
0.1u Z
25V
IC8602
IXB816WJ
A16
GND
DQ7
DQ6
DQ5
DQ4
DQ11
DQ10
DQ9
DQ8
OE
CE
BYTE
DQ15
DQ14
DQ13
DQ12
VCC
DQ3
DQ2
DQ1
DQ0
A0
A14
A12
A10
A8
A20
RP
WP
A18
A7
A5
A3
A1
A15
A13
A11
A9
A19
WE
NC
RB
A17
A6
A4
A2
R8617
1K
R8624
0
C8670
0.1u Z
25V
11
12
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19

(1/8) Please peel off and refer to page 12-22.

(2/8) Please peel off and refer to page 12-23.

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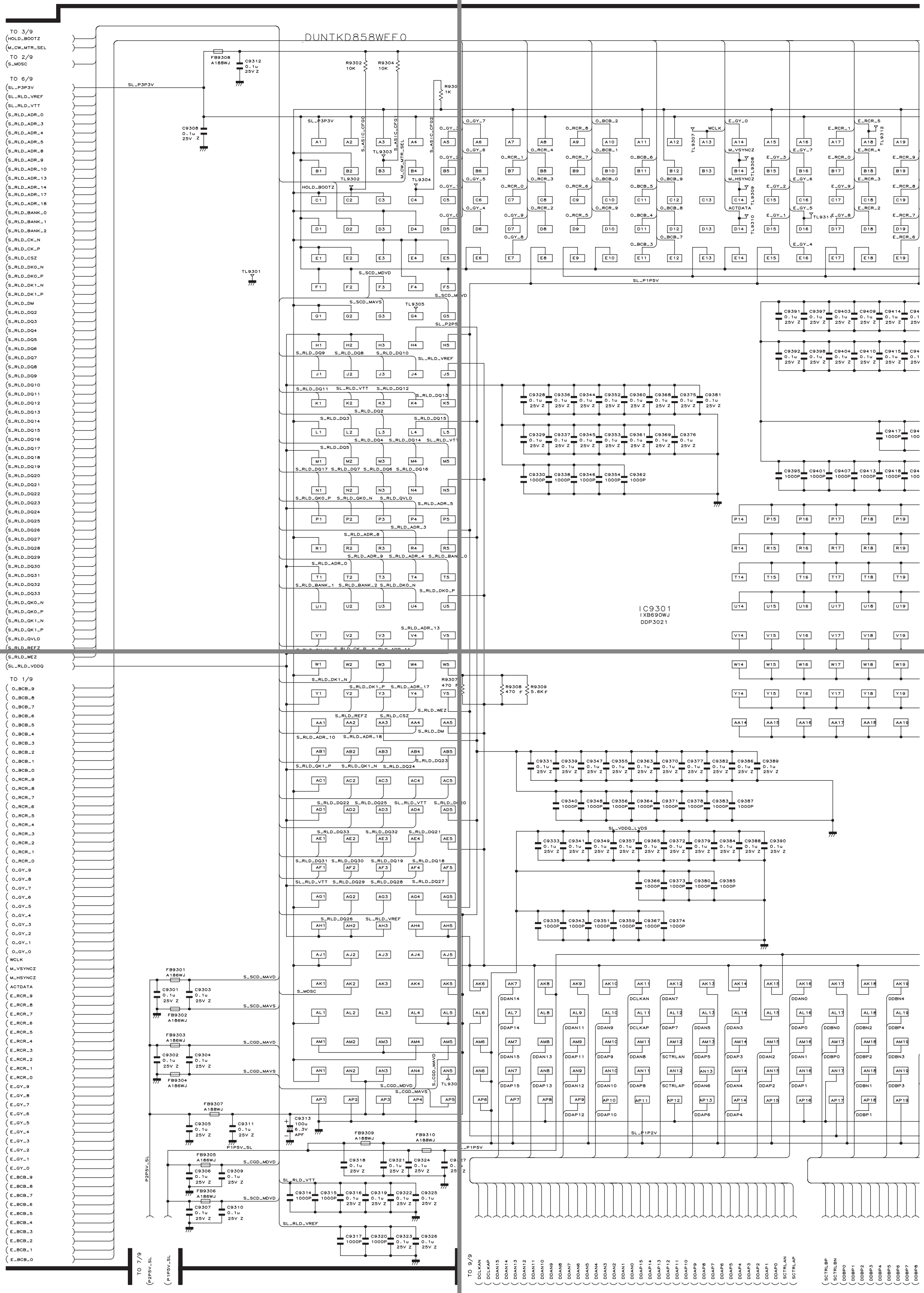
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TO 3/9
HOLD_BOOTZ
M_CW_MTR_SEL
TO 2/9
S_MOSC
TO 6/9
SL_P3P3V
SL_RLD_VREF
SL_RLD_VTT
S_RLD_ADR_0
S_RLD_ADR_3
S_RLD_ADR_4
S_RLD_ADR_5
S_RLD_ADR_8
S_RLD_ADR_9
S_RLD_ADR_10
S_RLD_ADR_13
S_RLD_ADR_14
S_RLD_ADR_17
S_RLD_ADR_18
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S_RLD_BANK_1
S_RLD_BANK_2
S_RLD_CK_N
S_RLD_CK_P
S_RLD_CSZ
S_RLD_DK0_N
S_RLD_DK0_P
S_RLD_DK1_N
S_RLD_DK1_P
S_RLD_DM
S_RLD_DQ2
S_RLD_DQ3
S_RLD_DQ4
S_RLD_DQ5
S_RLD_DQ6
S_RLD_DQ7
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S_RLD_DQ14
S_RLD_DQ15
S_RLD_DQ16
S_RLD_DQ17
S_RLD_DQ18
S_RLD_DQ19
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S_RLD_DQ21
S_RLD_DQ22
S_RLD_DQ23
S_RLD_DQ24
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S_RLD_DQ26
S_RLD_DQ27
S_RLD_DQ28
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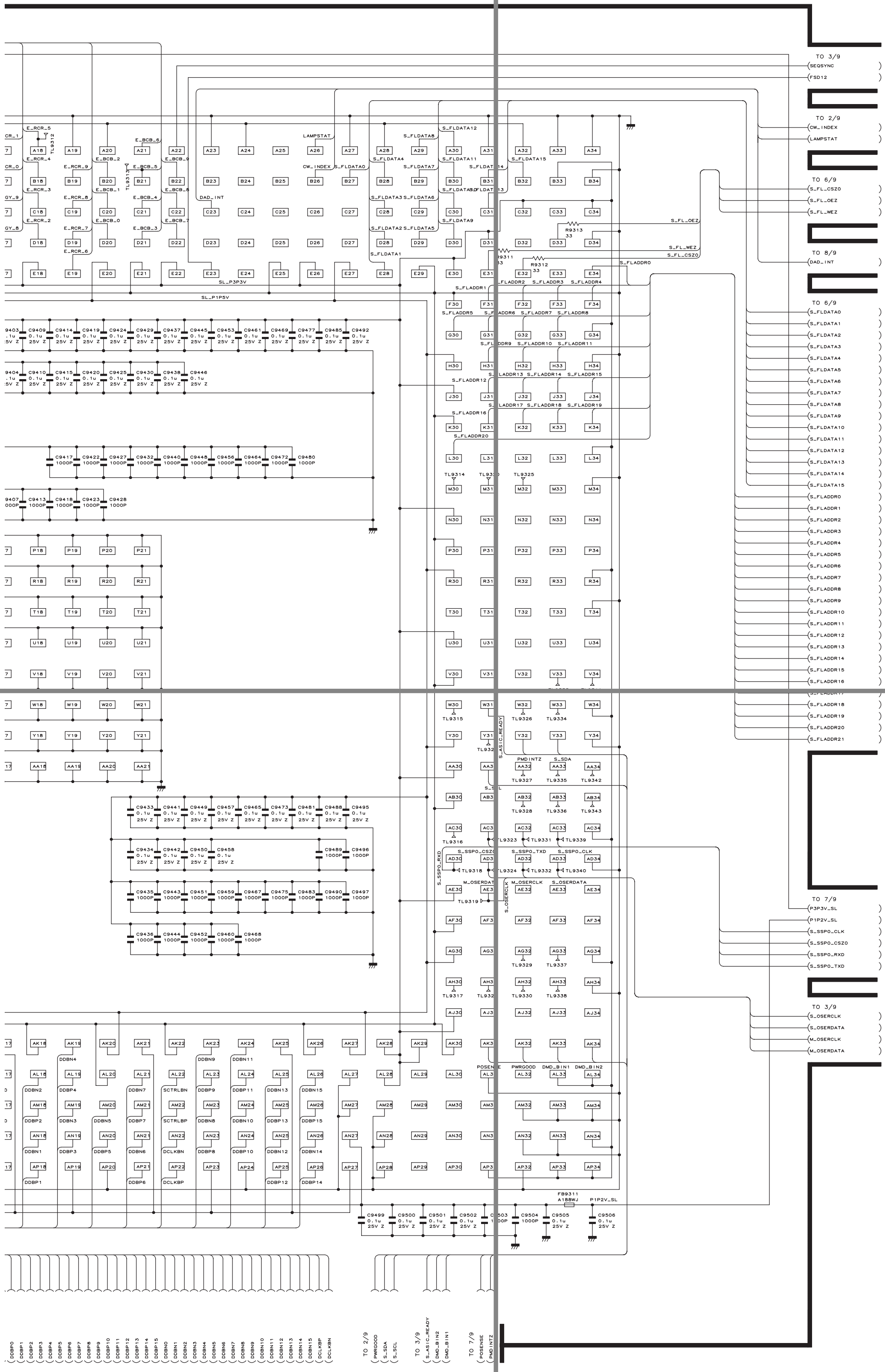
S_RLD_DQ30
S_RLD_DQ31
S_RLD_DQ32
S_RLD_DQ33
S_RLD_QK0_N
S_RLD_QK0_P
S_RLD_QK1_N
S_RLD_QK1_P
S_RLD_QVLD
S_RLD_REFZ
S_RLD_WEZ
SL_RLD_VDDQ
TO 1/9
O_BCB_9
O_BCB_8
O_BCB_7
O_BCB_6
O_BCB_5
O_BCB_4
O_BCB_3
O_BCB_2
O_BCB_1
O_BCB_0
O_RCR_9
O_RCR_8
O_RCR_7
O_RCR_6
O_RCR_5
O_RCR_4
O_RCR_3
O_RCR_2
O_RCR_1
O_RCR_0
O_GY_9
O_GY_8
O_GY_7
O_GY_6
O_GY_5
O_GY_4
O_GY_3
O_GY_2
O_GY_1
O_GY_0
WCLK
M_VSYNCZ
M_HSYNCZ
ACTDATA
E_RCR_9
E_RCR_8
E_RCR_7
E_RCR_6
E_RCR_5
E_RCR_4
E_RCR_3
E_RCR_2
E_RCR_1
E_RCR_0
E_GY_9
E_GY_8
E_GY_7
E_GY_6
E_GY_5
E_GY_4
E_GY_3
E_GY_2
E_GY_1
E_GY_0
E_BCB_9
E_BCB_8
E_BCB_7
E_BCB_6
E_BCB_5
E_BCB_4
E_BCB_3
E_BCB_2
E_BCB_1
E_BCB_0
FB9308 A188WJ
C9312 0.1u 25V Z
C9308 0.1u 25V Z
R9302 10K
R9304 10K
R9301 1K
TL9301
TL9302
TL9303
TL9304
TL9305
IC9301
IXB690WJ
DDP3021
R9307 470 F
R9308 470 F
R9309 5.6K F
FB9301 A186WJ
FB9302 A186WJ
FB9303 A186WJ
FB9304 A186WJ
FB9305 A186WJ
FB9306 A186WJ
FB9307 A188WJ
FB9309 A188WJ
FB9310 A188WJ
C9313 100u 6.3V APF
S_SCD_MAVD
S_SCD_MAVS
S_CGD_MAVD
S_CGD_MAVS
S_CGD_MDVD
SL_P1P5V
SL_P1P2V
SL_VDDQ_LVDS
P2P5V_SL
P1P5V_SL
TO 7/9
TO 9/9
DCLKAN
DCLKAP
SCTRLAN
SCTRLAP
SCTRLBP
SCTRLBN

(5/8) Please peel off and refer to page 12-26.

(6/8) Please peel off and refer to page 12-27.

(3/8) Please peel off and refer to page 12-24.

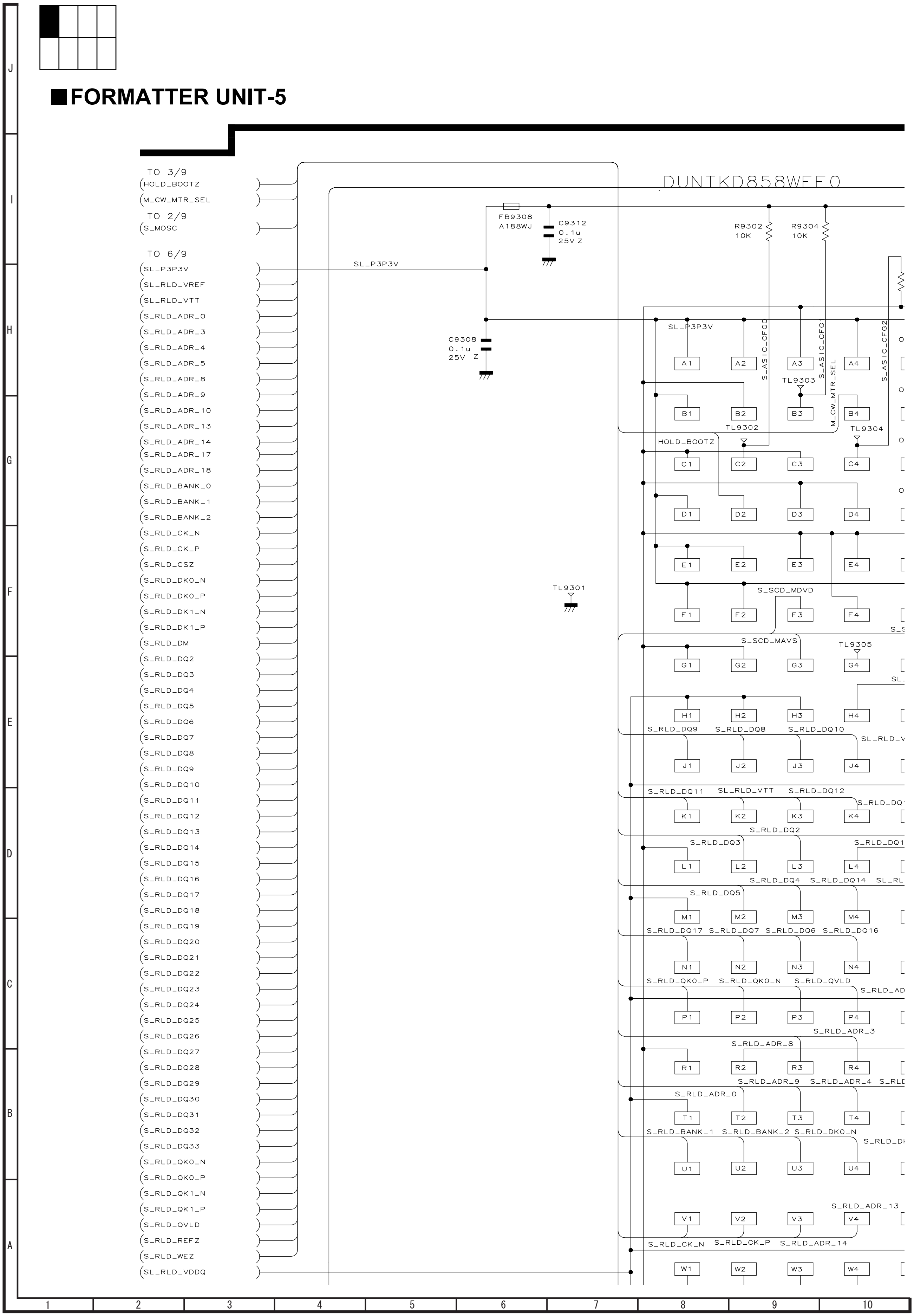
(4/8) Please peel off and refer to page 12-25.


TO 3/9
SEQSYNC
FSD12
TO 2/9
CW_INDEX
LAMPSTAT
TO 6/9
S_FL_CSZ0
S_FL_OEZ
S_FL_WEZ
TO 8/9
DAD_INT
TO 6/9
S_FLDATA0
S_FLDATA1
S_FLDATA2
S_FLDATA3
S_FLDATA4
S_FLDATA5
S_FLDATA6
S_FLDATA7
S_FLDATA8
S_FLDATA9
S_FLDATA10
S_FLDATA11
S_FLDATA12
S_FLDATA13
S_FLDATA14
S_FLDATA15
S_FLADDR0
S_FLADDR1
S_FLADDR2
S_FLADDR3
S_FLADDR4
S_FLADDR5
S_FLADDR6
S_FLADDR7
S_FLADDR8
S_FLADDR9
S_FLADDR10
S_FLADDR11
S_FLADDR12
S_FLADDR13
S_FLADDR14
S_FLADDR15
S_FLADDR16
S_FLADDR18
S_FLADDR19
S_FLADDR20
S_FLADDR21
TO 7/9
P3P3V_SL
P1P2V_SL
S_SSP0_CLK
S_SSP0_CSZ0
S_SSP0_RXD
S_SSP0_TXD
TO 3/9
S_OSERCLK
S_OSERDATA
M_OSERCLK
M_OSERDATA
SL_P3P3V
SL_P1P5V
FB9311
P1P2V_SL
TO 2/9
PWRGOOD
S_SDA
S_SCL
TO 3/9
S_ASIC_READY
DMD_BIN2
DMD_BIN1
TO 7/9
POSENSE
PMDINTZ

(7/8) Please peel off and refer to page 12-28.

(8/8) Please peel off and refer to page 12-29.

■FORMATTER UNIT-5


TO 3/9
HOLD_BOOTZ
M_CW_MTR_SEL
TO 2/9
S_MOSC
TO 6/9
SL_P3P3V
SL_RLD_VREF
SL_RLD_VTT
S_RLD_ADR_0
S_RLD_ADR_3
S_RLD_ADR_4
S_RLD_ADR_5
S_RLD_ADR_8
S_RLD_ADR_9
S_RLD_ADR_10
S_RLD_ADR_13
S_RLD_ADR_14
S_RLD_ADR_17
S_RLD_ADR_18
S_RLD_BANK_0
S_RLD_BANK_1
S_RLD_BANK_2
S_RLD_CK_N
S_RLD_CK_P
S_RLD_CSZ
S_RLD_DK0_N
S_RLD_DK0_P
S_RLD_DK1_N
S_RLD_DK1_P
S_RLD_DM
S_RLD_DQ2
S_RLD_DQ3
S_RLD_DQ4
S_RLD_DQ5
S_RLD_DQ6
S_RLD_DQ7
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S_RLD_DQ19
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S_RLD_DQ28
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S_RLD_DQ30
S_RLD_DQ31
S_RLD_DQ32
S_RLD_DQ33
S_RLD_QK0_N
S_RLD_QK0_P
S_RLD_QK1_N
S_RLD_QK1_P
S_RLD_QVLD
S_RLD_REFZ
S_RLD_WEZ
SL_RLD_VDDQ
DUNTKD858WEF0
SL_P3P3V
FB9308
A188WJ
C9312
0.1u
25V Z
R9302
10K
R9304
10K
C9308
0.1u
25V Z
TL9301
SL_P3P3V
S_ASIC_CFG0
S_ASIC_CFG1
S_ASIC_CFG2
M_CW_MTR_SEL
TL9303
TL9302
TL9304
HOLD_BOOTZ
A1
A2
A3
A4
B1
B2
B3
B4
C1
C2
C3
C4
D1
D2
D3
D4
E1
E2
E3
E4
S_SCD_MDVD
F1
F2
F3
F4
S_SCD_MAVS
TL9305
G1
G2
G3
G4
H1
H2
H3
H4
S_RLD_DQ9
S_RLD_DQ8
S_RLD_DQ10
J1
J2
J3
J4
S_RLD_DQ11
SL_RLD_VTT
S_RLD_DQ12
K1
K2
K3
K4
S_RLD_DQ2
S_RLD_DQ3
L1
L2
L3
L4
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S_RLD_DQ5
M1
M2
M3
M4
S_RLD_DQ17
S_RLD_DQ7
S_RLD_DQ6
S_RLD_DQ16
N1
N2
N3
N4
S_RLD_QK0_P
S_RLD_QK0_N
S_RLD_QVLD
P1
P2
P3
P4
S_RLD_ADR_3
S_RLD_ADR_8
R1
R2
R3
R4
S_RLD_ADR_9
S_RLD_ADR_4
S_RLD_ADR_0
T1
T2
T3
T4
S_RLD_BANK_1
S_RLD_BANK_2
S_RLD_DK0_N
U1
U2
U3
U4
S_RLD_ADR_13
V1
V2
V3
V4
S_RLD_CK_N
S_RLD_CK_P
S_RLD_ADR_14
W1
W2
W3
W4
J
I
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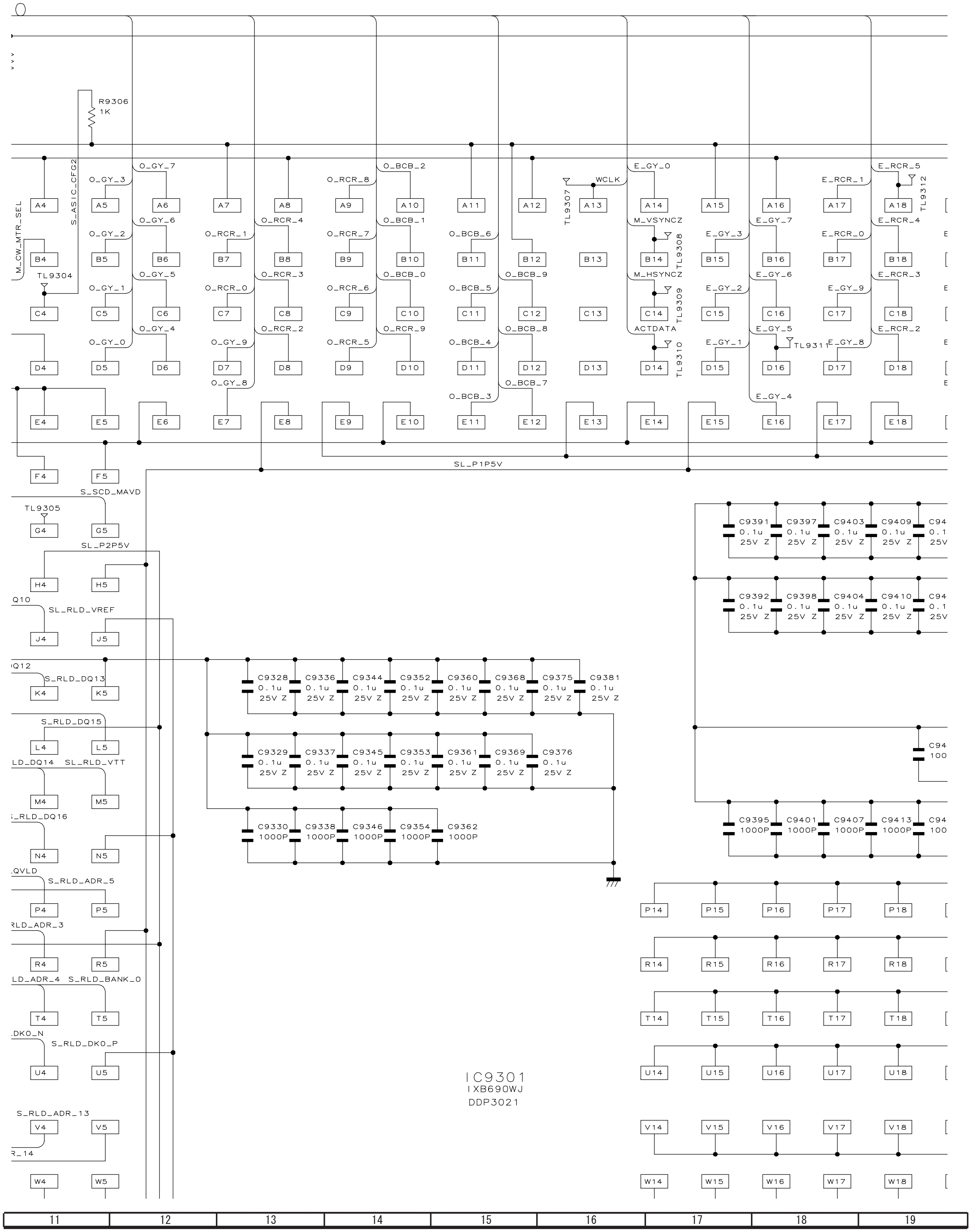
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TL9309
TL9310
TL9311
TL9312
WCLK
M_VSYNCZ
M_HSYNCZ
ACTDATA
O_GY_0
O_GY_1
O_GY_2
O_GY_3
O_GY_4
O_GY_5
O_GY_6
O_GY_7
O_GY_8
O_GY_9
O_RCR_0
O_RCR_1
O_RCR_2
O_RCR_3
O_RCR_4
O_RCR_5
O_RCR_6
O_RCR_7
O_RCR_8
O_RCR_9
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O_BCB_1
O_BCB_2
O_BCB_3
O_BCB_4
O_BCB_5
O_BCB_6
O_BCB_7
O_BCB_8
O_BCB_9
E_GY_0
E_GY_1
E_GY_2
E_GY_3
E_GY_4
E_GY_5
E_GY_6
E_GY_7
E_GY_8
E_GY_9
E_RCR_0
E_RCR_1
E_RCR_2
E_RCR_3
E_RCR_4
E_RCR_5
SL_P1P5V
S_SCD_MAVD
SL_P2P5V
SL_RLD_VREF
S_RLD_DQ13
S_RLD_DQ15
SL_RLD_VTT
S_RLD_ADR_5
S_RLD_BANK_0
S_RLD_DK0_P
S_RLD_ADR_13
C9328 0.1u 25V Z
C9336 0.1u 25V Z
C9344 0.1u 25V Z
C9352 0.1u 25V Z
C9360 0.1u 25V Z
C9368 0.1u 25V Z
C9375 0.1u 25V Z
C9381 0.1u 25V Z
C9329 0.1u 25V Z
C9337 0.1u 25V Z
C9345 0.1u 25V Z
C9353 0.1u 25V Z
C9361 0.1u 25V Z
C9369 0.1u 25V Z
C9376 0.1u 25V Z
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C9338 1000P
C9346 1000P
C9354 1000P
C9362 1000P
C9391 0.1u 25V Z
C9397 0.1u 25V Z
C9403 0.1u 25V Z
C9409 0.1u 25V Z
C9392 0.1u 25V Z
C9398 0.1u 25V Z
C9404 0.1u 25V Z
C9410 0.1u 25V Z
C9395 1000P
C9401 1000P
C9407 1000P
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DDP3021
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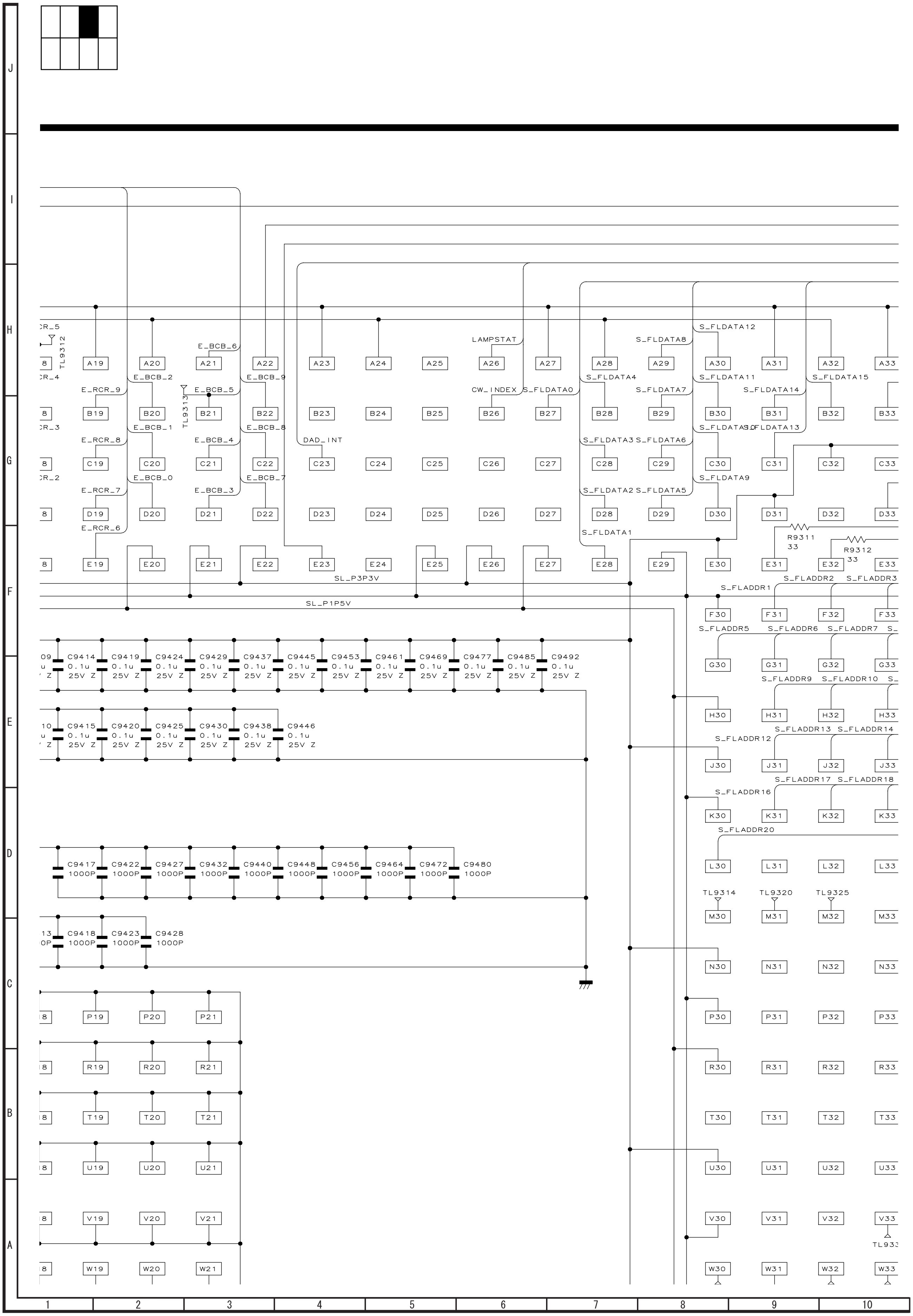
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C
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TL9313
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A22
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A29
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A32
A33
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B21
B22
B23
B24
B25
B26
B27
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B29
B30
B31
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B33
E_BCB_1
E_BCB_8
S_FLDATA10
S_FLDATA13
E_RCR_8
E_BCB_4
DAD_INT
S_FLDATA3
S_FLDATA6
C19
C20
C21
C22
C23
C24
C25
C26
C27
C28
C29
C30
C31
C32
C33
E_BCB_0
E_BCB_7
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E_RCR_7
E_BCB_3
S_FLDATA2
S_FLDATA5
D19
D20
D21
D22
D23
D24
D25
D26
D27
D28
D29
D30
D31
D32
D33
E_RCR_6
S_FLDATA1
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R9312
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E23
E24
E25
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E27
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E30
E31
E32
E33
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S_FLADDR2
S_FLADDR3
S_FLADDR1
SL_P1P5V
F30
F31
F32
F33
S_FLADDR5
S_FLADDR6
S_FLADDR7
C9414
C9419
C9424
C9429
C9437
C9445
C9453
C9461
C9469
C9477
C9485
C9492
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H33
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S_FLADDR12
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J32
J33
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S_FLADDR18
S_FLADDR16
K30
K31
K32
K33
S_FLADDR20
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C9427
C9432
C9440
C9448
C9456
C9464
C9472
C9480
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L31
L32
L33
TL9314
TL9320
TL9325
M30
M31
M32
M33
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C9423
C9428
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N31
N32
N33
P19
P20
P21
P30
P31
P32
P33
R19
R20
R21
R30
R31
R32
R33
T19
T20
T21
T30
T31
T32
T33
U19
U20
U21
U30
U31
U32
U33
V19
V20
V21
V30
V31
V32
V33
W19
W20
W21
W30
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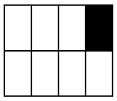
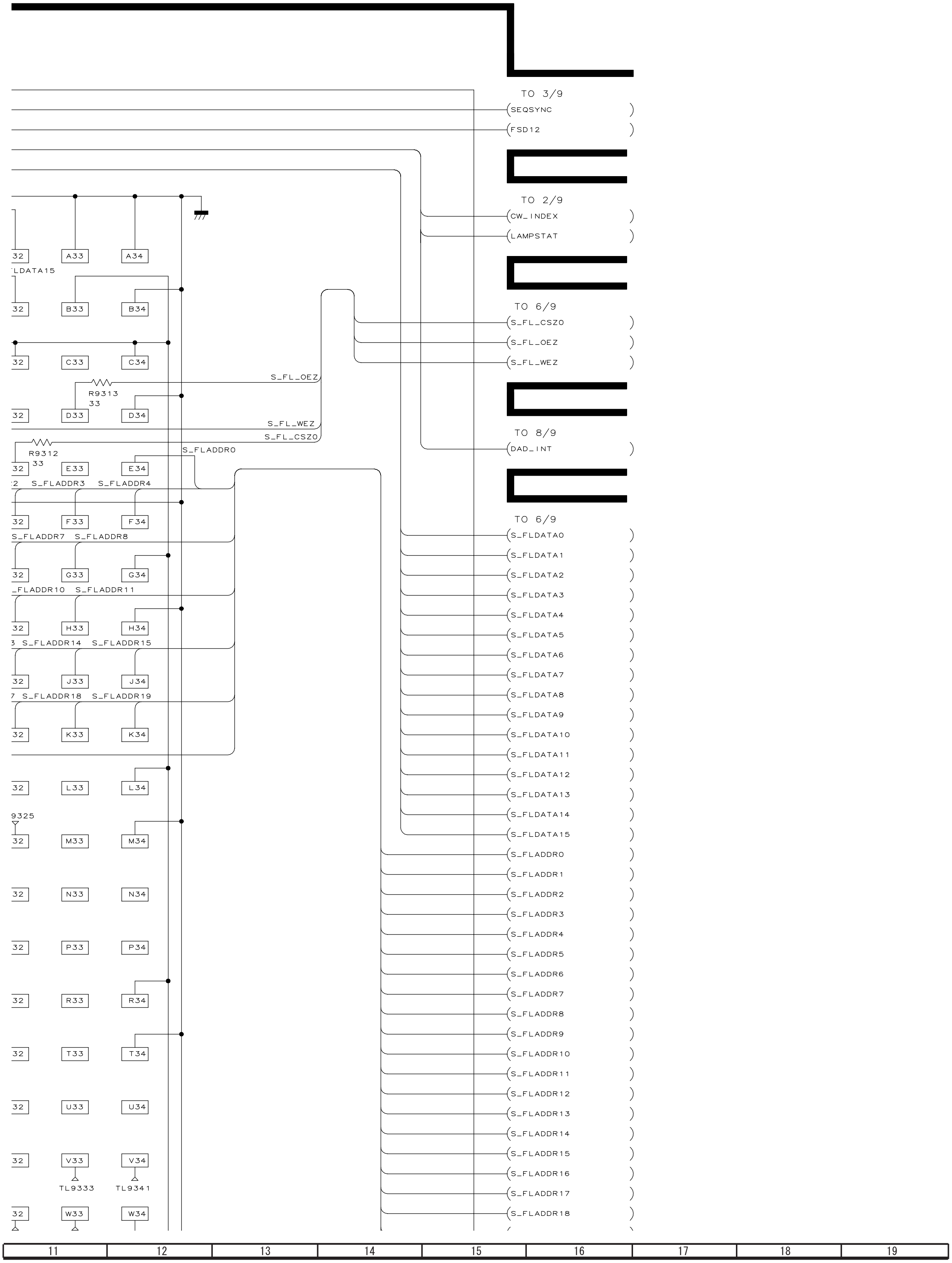
W32
W33




TO 3/9
SEQSYNC
FSD12
TO 2/9
CW_INDEX
LAMPSTAT
TO 6/9
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S_FL_OEZ
S_FL_WEZ
TO 8/9
DAD_INT
TO 6/9
S_FLDATA0
S_FLDATA1
S_FLDATA2
S_FLDATA3
S_FLDATA4
S_FLDATA5
S_FLDATA6
S_FLDATA7
S_FLDATA8
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S_FLDATA10
S_FLDATA11
S_FLDATA12
S_FLDATA13
S_FLDATA14
S_FLDATA15
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A34
LDATA15
B33
B34
C33
C34
S_FL_OEZ
R9313
33
D33
D34
S_FL_WEZ
S_FL_CSZ0
S_FLADDR0
R9312
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E33
E34
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S_FLADDR4
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F34
S_FLADDR7
S_FLADDR8
G33
G34
_FLADDR10
S_FLADDR11
H33
H34
S_FLADDR14
S_FLADDR15
J33
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S_FLADDR18
S_FLADDR19
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K34
L33
L34
9325
M33
M34
N33
N34
P33
P34
R33
R34
T33
T34
U33
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TL9341
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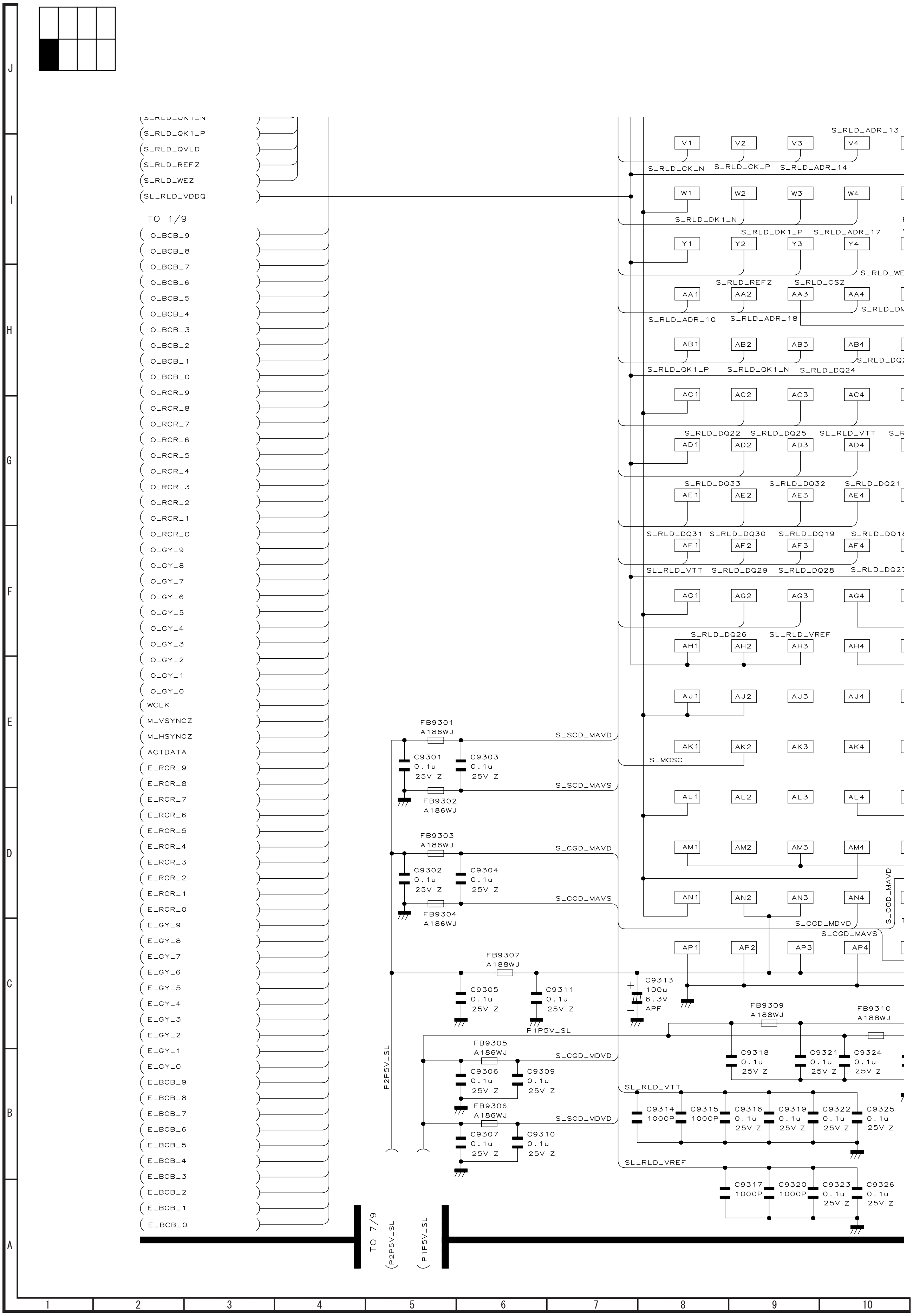
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O_BCB_8
O_BCB_7
O_BCB_6
O_BCB_5
O_BCB_4
O_BCB_3
O_BCB_2
O_BCB_1
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O_RCR_8
O_RCR_7
O_RCR_6
O_RCR_5
O_RCR_4
O_RCR_3
O_RCR_2
O_RCR_1
O_RCR_0
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O_GY_8
O_GY_7
O_GY_6
O_GY_5
O_GY_4
O_GY_3
O_GY_2
O_GY_1
O_GY_0
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M_VSYNCZ
M_HSYNCZ
ACTDATA
E_RCR_9
E_RCR_8
E_RCR_7
E_RCR_6
E_RCR_5
E_RCR_4
E_RCR_3
E_RCR_2
E_RCR_1
E_RCR_0
E_GY_9
E_GY_8
E_GY_7
E_GY_6
E_GY_5
E_GY_4
E_GY_3
E_GY_2
E_GY_1
E_GY_0
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E_BCB_8
E_BCB_7
E_BCB_6
E_BCB_5
E_BCB_4
E_BCB_3
E_BCB_2
E_BCB_1
E_BCB_0
TO 7/9
(P2P5V_SL
(P1P5V_SL
P2P5V_SL
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FB9302 A186WJ
FB9303 A186WJ
FB9304 A186WJ
FB9305 A186WJ
FB9306 A186WJ
FB9307 A188WJ
FB9309 A188WJ
FB9310 A188WJ
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C9306 0.1u 25V Z
C9307 0.1u 25V Z
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C9310 0.1u 25V Z
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C9314 1000P
C9315 1000P
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S_SCD_MAVS
S_CGD_MAVD
S_CGD_MAVS
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S_SCD_MDVD
P1P5V_SL
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SL_RLD_VREF
S_MOSC
S_RLD_ADR_13
S_RLD_CK_N
S_RLD_CK_P
S_RLD_ADR_14
S_RLD_DK1_N
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S_RLD_CSZ
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S_RLD_DQ22
S_RLD_DQ25
SL_RLD_VTT
S_R
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S_CGD_MAVD
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V4
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W3
W4
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Y3
Y4
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AA3
AA4
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AB2
AB3
AB4
AC1
AC2
AC3
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AD3
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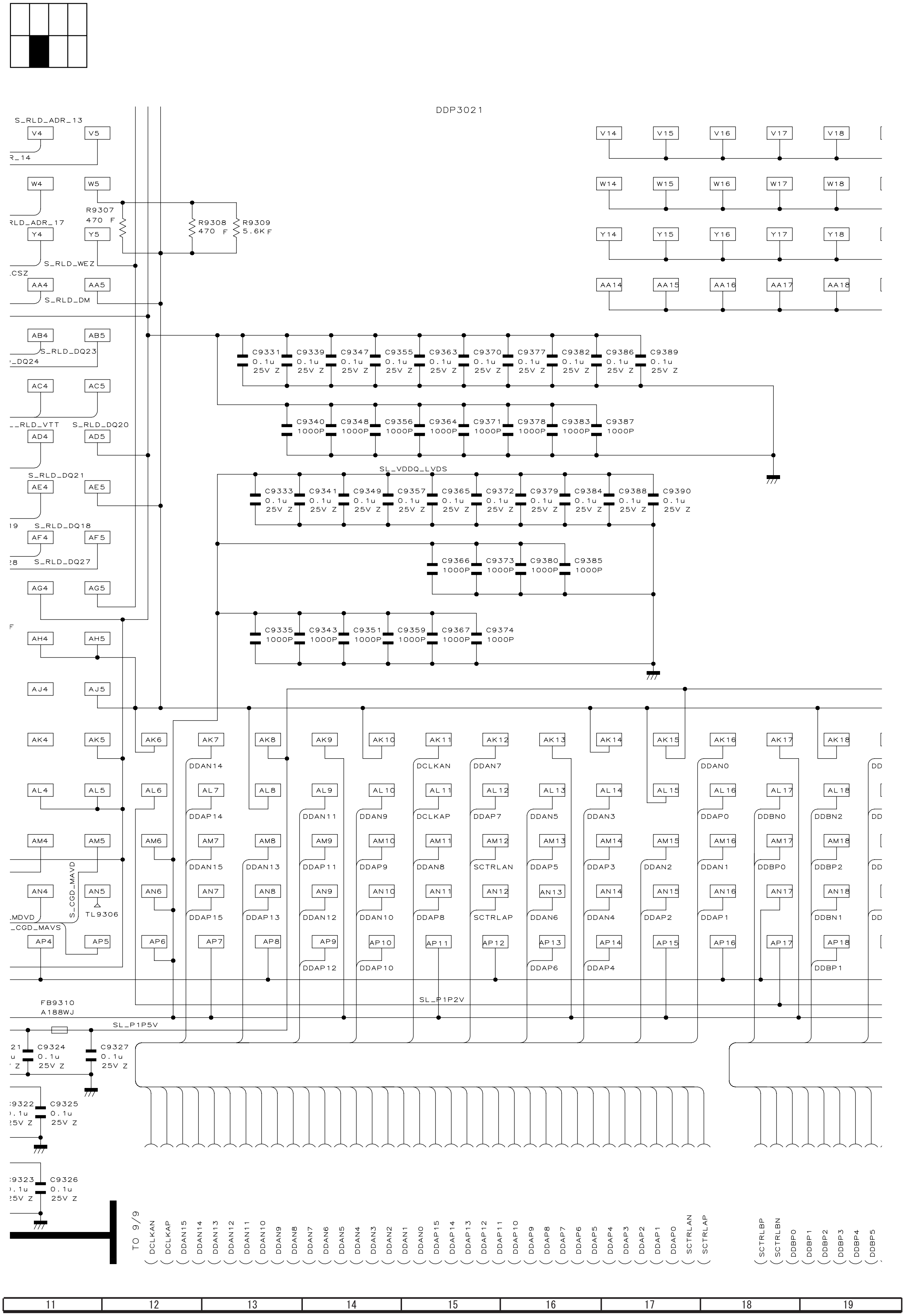
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470 F
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Y5
S_RLD_WEZ
.CSZ
AA4
AA5
S_RLD_DM
AB4
AB5
S_RLD_DQ23
_DQ24
AC4
AC5
__RLD_VTT
S_RLD_DQ20
AD4
AD5
S_RLD_DQ21
AE4
AE5
S_RLD_DQ18
AF4
AF5
S_RLD_DQ27
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AG5
AH4
AH5
AJ4
AJ5
V14
V15
V16
V17
V18
W14
W15
W16
W17
W18
Y14
Y15
Y16
Y17
Y18
AA14
AA15
AA16
AA17
AA18
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C9347 0.1u 25V Z
C9355 0.1u 25V Z
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C9348 1000P
C9356 1000P
C9364 1000P
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C9378 1000P
C9383 1000P
C9387 1000P
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C9384 0.1u 25V Z
C9388 0.1u 25V Z
C9390 0.1u 25V Z
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C9385 1000P
C9335 1000P
C9343 1000P
C9351 1000P
C9359 1000P
C9367 1000P
C9374 1000P
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DCLKAN
DDAN7
DDAN0
AL4 AL5 AL6 AL7 AL8 AL9 AL10 AL11 AL12 AL13 AL14 AL15 AL16 AL17 AL18
DDAP14
DDAN11
DDAN9
DCLKAP
DDAP7
DDAN5
DDAN3
DDAP0
DDBN0
DDBN2
AM4 AM5 AM6 AM7 AM8 AM9 AM10 AM11 AM12 AM13 AM14 AM15 AM16 AM17 AM18
S_CGD_MAVD
DDAN15
DDAN13
DDAP11
DDAP9
DDAN8
SCTRLAN
DDAP5
DDAP3
DDAN2
DDAN1
DDBP0
DDBP2
AN4 AN5 AN6 AN7 AN8 AN9 AN10 AN11 AN12 AN13 AN14 AN15 AN16 AN17 AN18
.MDVD
TL9306
DDAP15
DDAP13
DDAN12
DDAN10
DDAP8
SCTRLAP
DDAN6
DDAN4
DDAP2
DDAP1
DDBN1
_CGD_MAVS
AP4 AP5 AP6 AP7 AP8 AP9 AP10 AP11 AP12 AP13 AP14 AP15 AP16 AP17 AP18
DDAP12
DDAP10
DDAP6
DDAP4
DDBP1
SL_P1P2V
FB9310
A188WJ
SL_P1P5V
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C9327 0.1u 25V Z
C9322 0.1u 25V Z
C9325 0.1u 25V Z
C9323 0.1u 25V Z
C9326 0.1u 25V Z
TO 9/9
DCLKAN
DCLKAP
DDAN15
DDAN14
DDAN13
DDAN12
DDAN11
DDAN10
DDAN9
DDAN8
DDAN7
DDAN6
DDAN5
DDAN4
DDAN3
DDAN2
DDAN1
DDAN0
DDAP15
DDAP14
DDAP13
DDAP12
DDAP11
DDAP10
DDAP9
DDAP8
DDAP7
DDAP6
DDAP5
DDAP4
DDAP3
DDAP2
DDAP1
DDAP0
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SCTRLAP
SCTRLBP
SCTRLBN
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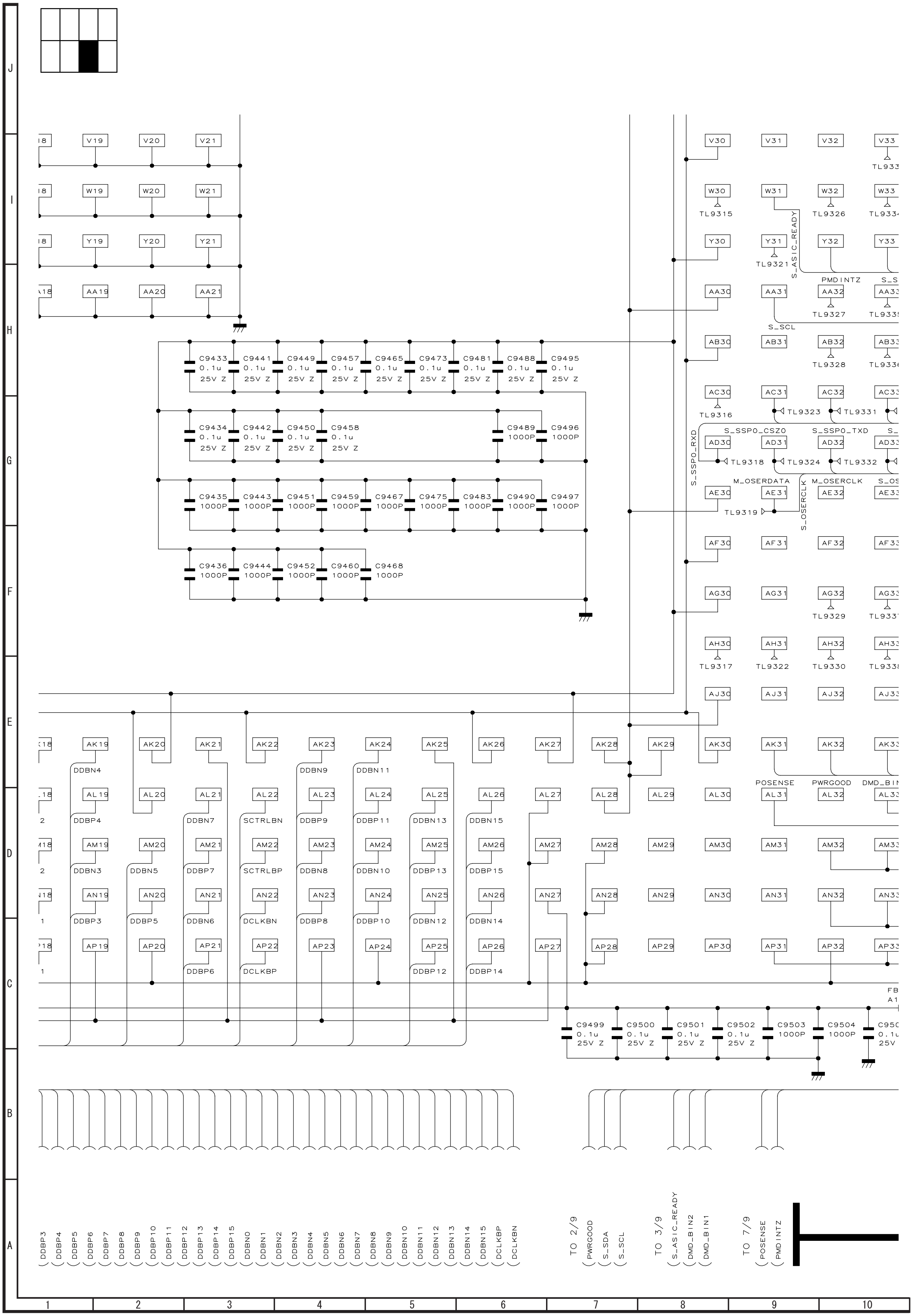

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V19
V20
V21
W19
W20
W21
Y19
Y20
Y21
AA19
AA20
AA21
V30
V31
V32
V33
TL933
W30
W31
W32
W33
TL9315
TL9326
S_ASIC_READY
Y30
Y31
Y32
Y33
TL9321
PMDINTZ
AA30
AA31
AA32
AA33
TL9327
S_SCL
AB30
AB31
AB32
AB33
TL9328
AC30
AC31
AC32
AC33
TL9316
TL9323
TL9331
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S_SSP0_TXD
S_SSP0_RXD
AD30
AD31
AD32
AD33
TL9318
TL9324
TL9332
M_OSERDATA
M_OSERCLK
AE30
AE31
AE32
AE33
TL9319
S_OSERCLK
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AF31
AF32
AF33
AG30
AG31
AG32
AG33
TL9329
AH30
AH31
AH32
AH33
TL9317
TL9322
TL9330
AJ30
AJ31
AJ32
AJ33
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C9441 0.1u 25V Z
C9449 0.1u 25V Z
C9457 0.1u 25V Z
C9465 0.1u 25V Z
C9473 0.1u 25V Z
C9481 0.1u 25V Z
C9488 0.1u 25V Z
C9495 0.1u 25V Z
C9434 0.1u 25V Z
C9442 0.1u 25V Z
C9450 0.1u 25V Z
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C9496 1000P
C9435 1000P
C9443 1000P
C9451 1000P
C9459 1000P
C9467 1000P
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C9483 1000P
C9490 1000P
C9497 1000P
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C9444 1000P
C9452 1000P
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AK21
AK22
AK23
AK24
AK25
AK26
AK27
AK28
AK29
AK30
AK31
AK32
AK33
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DDBN9
DDBN11
POSENSE
PWRGOOD
DMD_BIN
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AL20
AL21
AL22
AL23
AL24
AL25
AL26
AL27
AL28
AL29
AL30
AL31
AL32
AL33
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DDBN7
SCTRLBN
DDBP9
DDBP11
DDBN13
DDBN15
AM19
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AM28
AM29
AM30
AM31
AM32
AM33
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DDBN5
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DDBP13
DDBP15
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AN30
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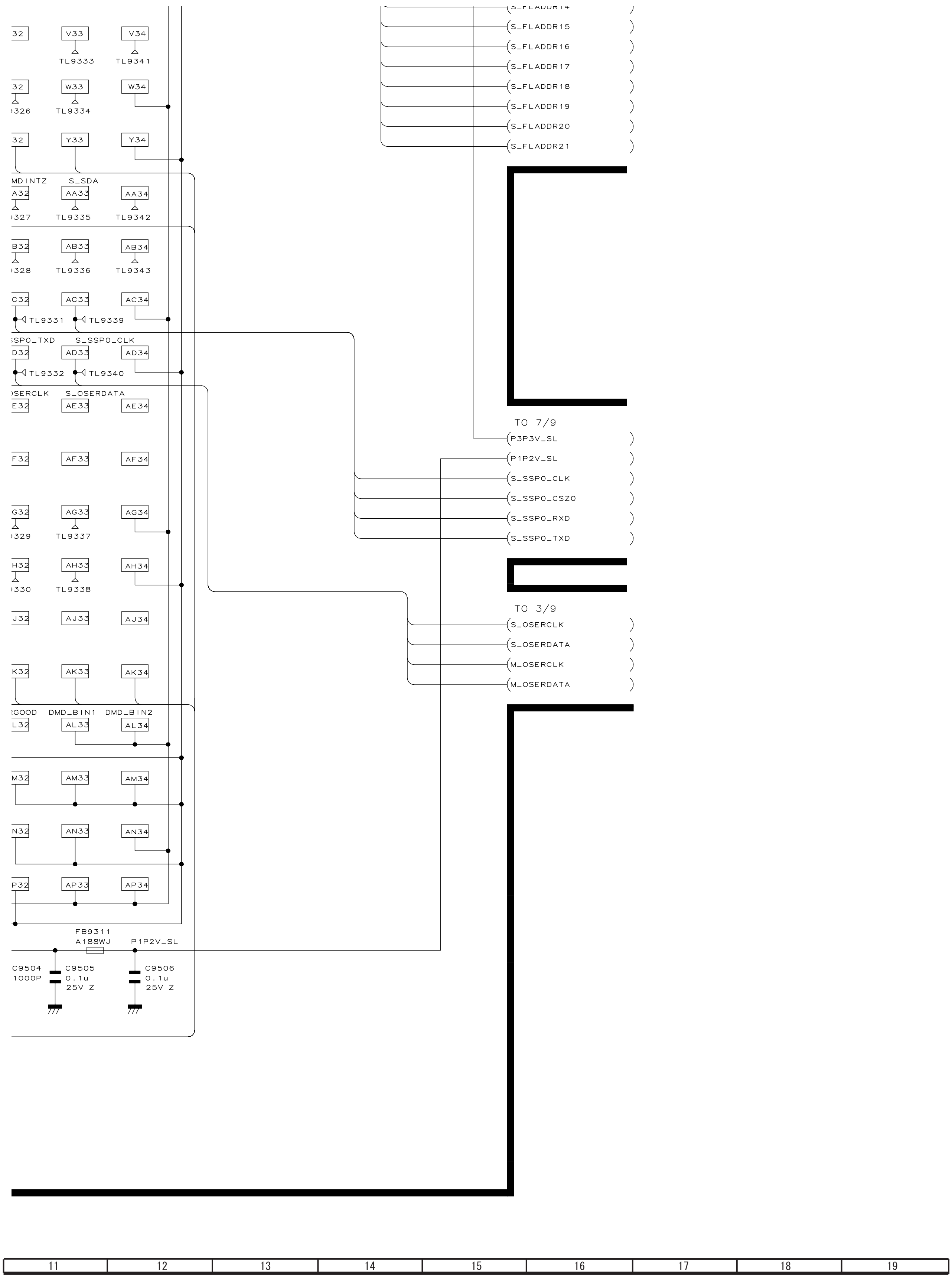
AN32
AN33
DDBP3
DDBP5
DDBN6
DCLKBN
DDBP8
DDBP10
DDBN12
DDBN14
AP19
AP20
AP21
AP22
AP23
AP24
AP25
AP26
AP27
AP28
AP29
AP30
AP31
AP32
AP33
DDBP6
DCLKBP
DDBP12
DDBP14
FB
A1
C9499 0.1u 25V Z
C9500 0.1u 25V Z
C9501 0.1u 25V Z
C9502 0.1u 25V Z
C9503 1000P
C9504 1000P
DDBP3
DDBP4
DDBP5
DDBP6
DDBP7
DDBP8
DDBP9
DDBP10
DDBP11
DDBP12
DDBP13
DDBP14
DDBP15
DDBN0
DDBN1
DDBN2
DDBN3
DDBN4
DDBN5
DDBN6
DDBN7
DDBN8
DDBN9
DDBN10
DDBN11
DDBN12
DDBN13
DDBN14
DDBN15
DCLKBP
DCLKBN
TO 2/9
PWRGOOD
S_SDA
S_SCL
TO 3/9
S_ASIC_READY
DMD_BIN2
DMD_BIN1
TO 7/9
POSENSE
PMDINTZ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V34
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TL9341
W33
W34
TL9334
Y33
Y34
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AA33
AA34
TL9335
TL9342
AB33
AB34
TL9336
TL9343
AC33
AC34
TL9331
TL9339
S_SSP0_CLK
AD33
AD34
TL9332
TL9340
S_OSERDATA
AE33
AE34
AF33
AF34
AG33
AG34
TL9337
AH33
AH34
TL9338
AJ33
AJ34
AK33
AK34
DMD_BIN1
DMD_BIN2
AL33
AL34
AM33
AM34
AN33
AN34
AP33
AP34
FB9311
A188WJ
P1P2V_SL
C9504
1000P
C9505
0.1u
25V Z
C9506
0.1u
25V Z
S_FLADDR15
S_FLADDR16
S_FLADDR17
S_FLADDR18
S_FLADDR19
S_FLADDR20
S_FLADDR21
TO 7/9
P3P3V_SL
P1P2V_SL
S_SSP0_CLK
S_SSP0_CSZ0
S_SSP0_RXD
S_SSP0_TXD
TO 3/9
S_OSERCLK
S_OSERDATA
M_OSERCLK
M_OSERDATA
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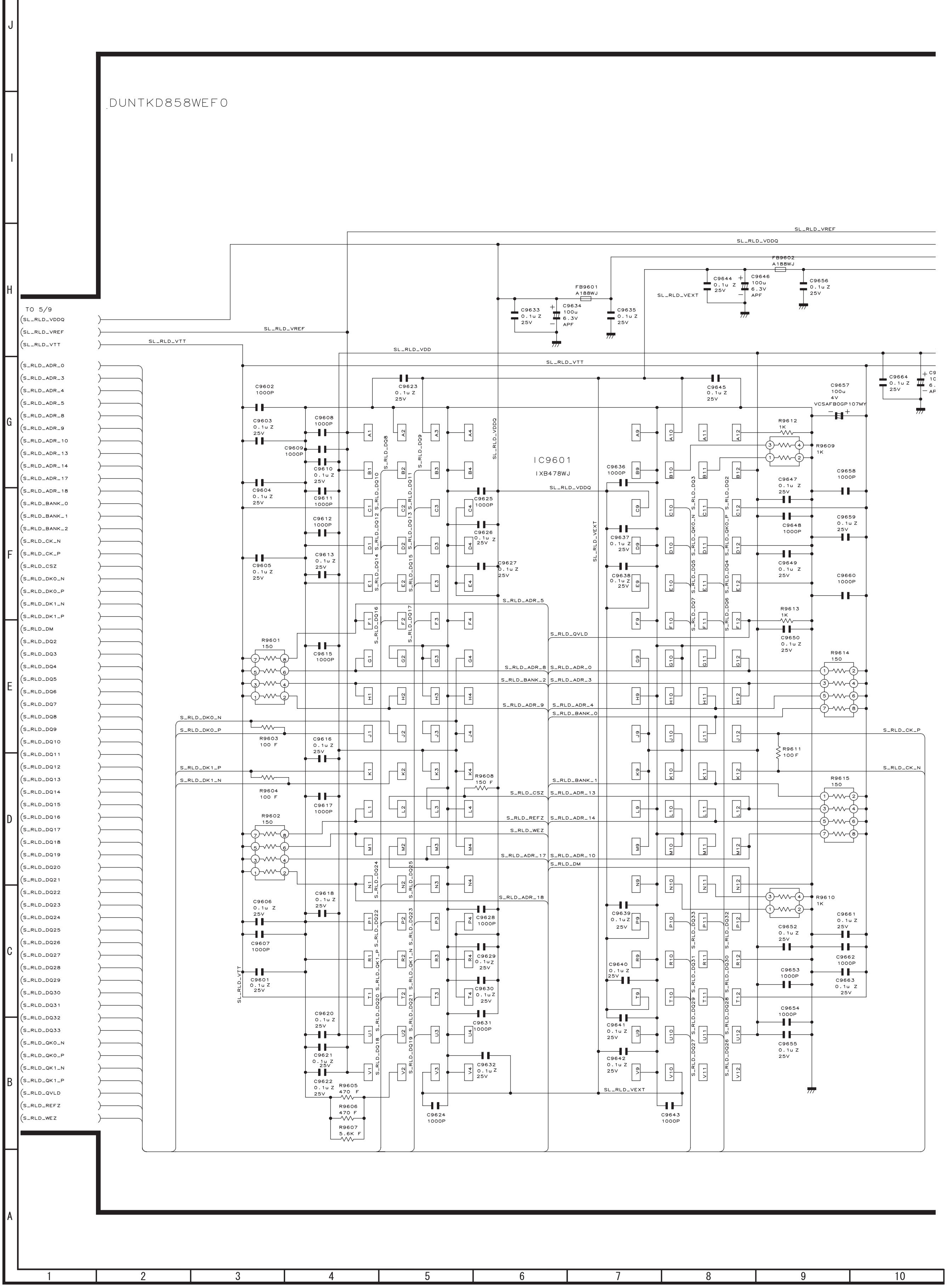
■FORMATTER Unit-6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TO 5/9
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S_RLD_ADR_9
S_RLD_ADR_10
S_RLD_ADR_13
S_RLD_ADR_14
S_RLD_ADR_17
S_RLD_ADR_18
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S_RLD_BANK_2
S_RLD_CK_N
S_RLD_CK_P
S_RLD_CSZ
S_RLD_DK0_N
S_RLD_DK0_P
S_RLD_DK1_N
S_RLD_DK1_P
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S_RLD_DQ4
S_RLD_DQ5
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SL_RLD_VEXT
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FB9602 A188WJ
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C9634 100u 6.3V APF
C9635 0.1u Z 25V
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C9654 1000P
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C9656 0.1u Z 25V
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C9658 1000P
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C9660 1000P
C9661 0.1u Z 25V
C9662 1000P
C9663 0.1u Z 25V
C9664 0.1u Z 25V
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R9602 150
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R9606 470 F
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R9608 150 F
R9609 1K
R9610 1K
R9611 100 F
R9612 1K
R9613 1K
R9614 150
R9615 150
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S_RLD_CK_N
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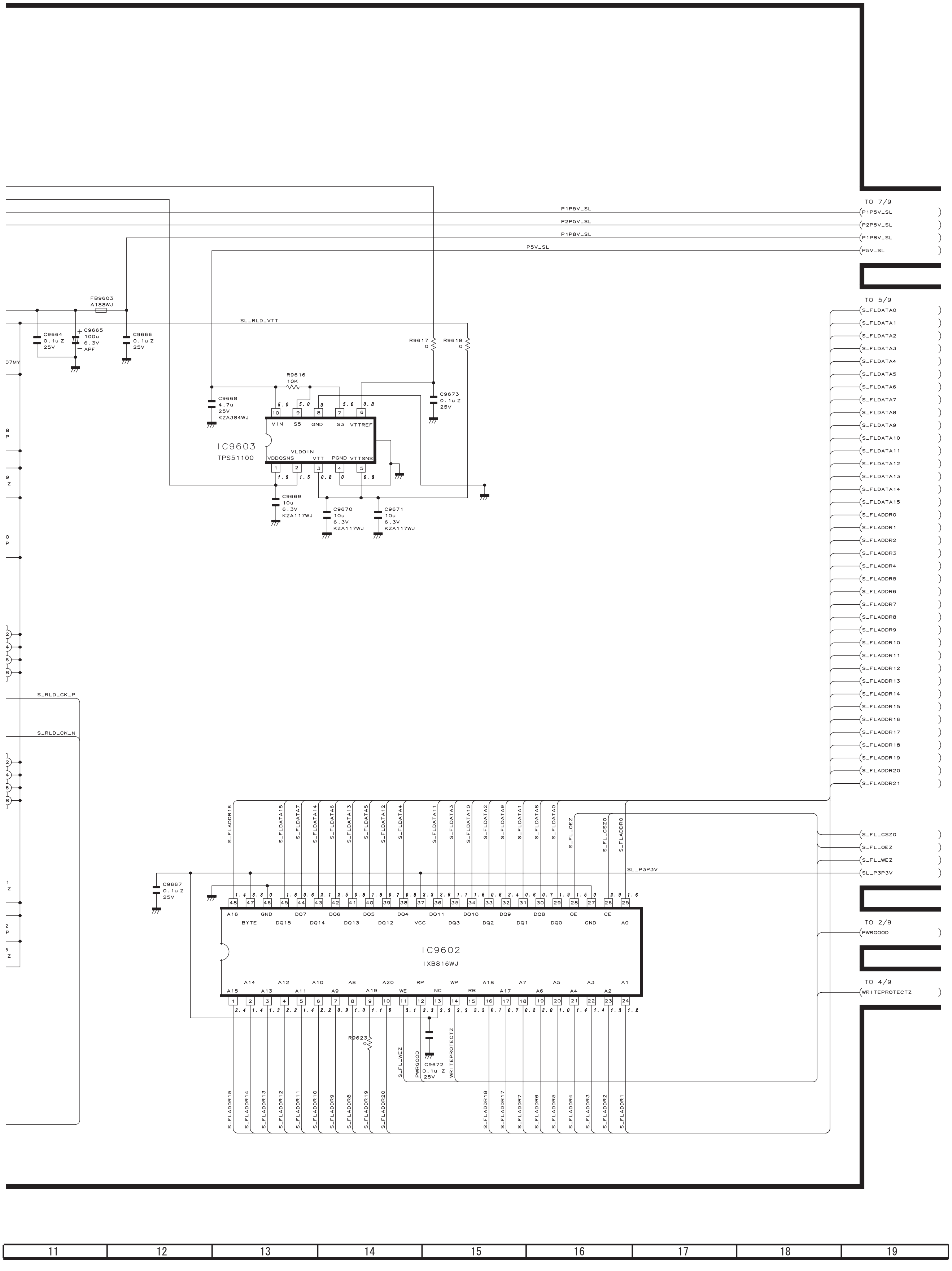
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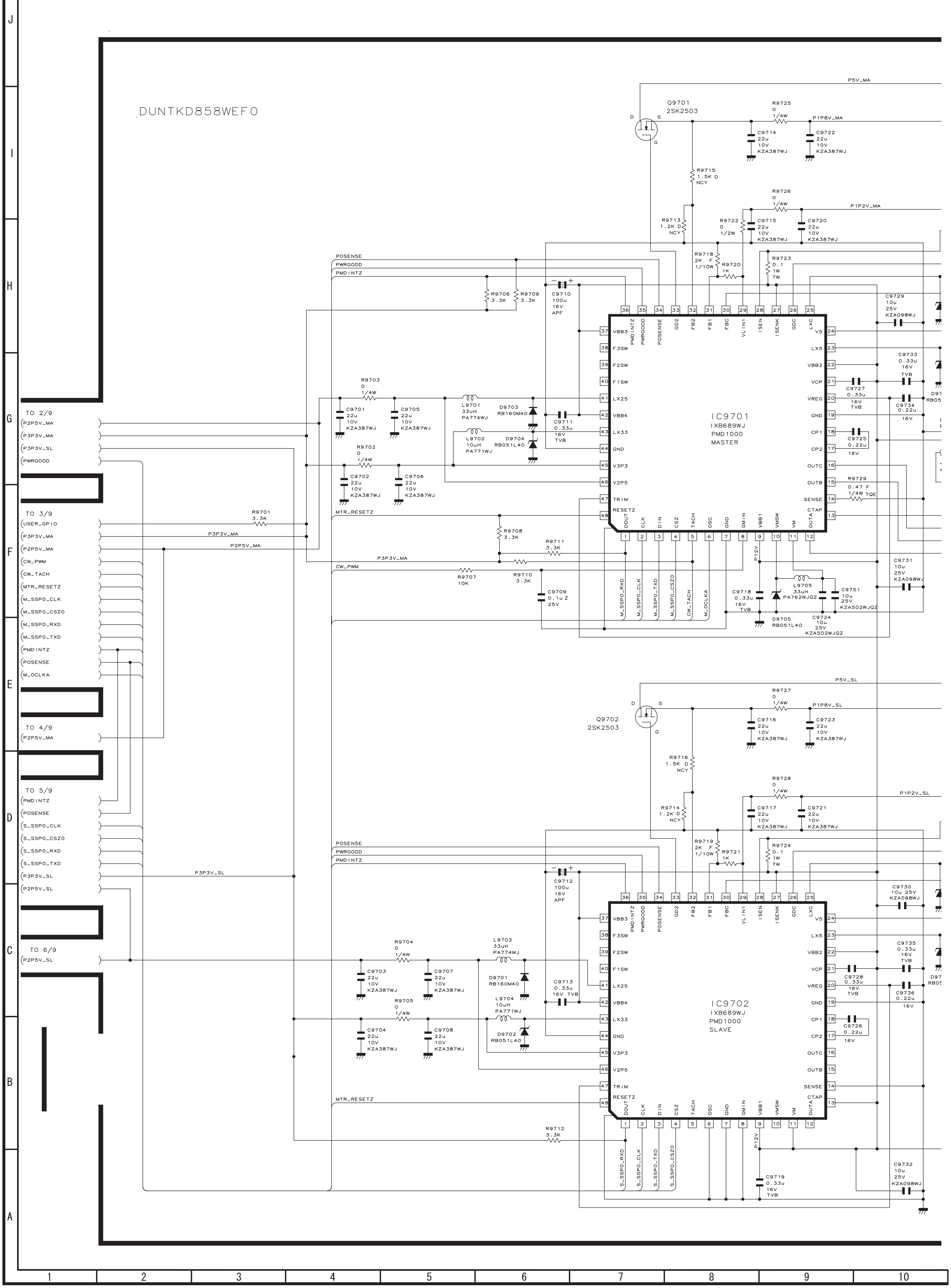
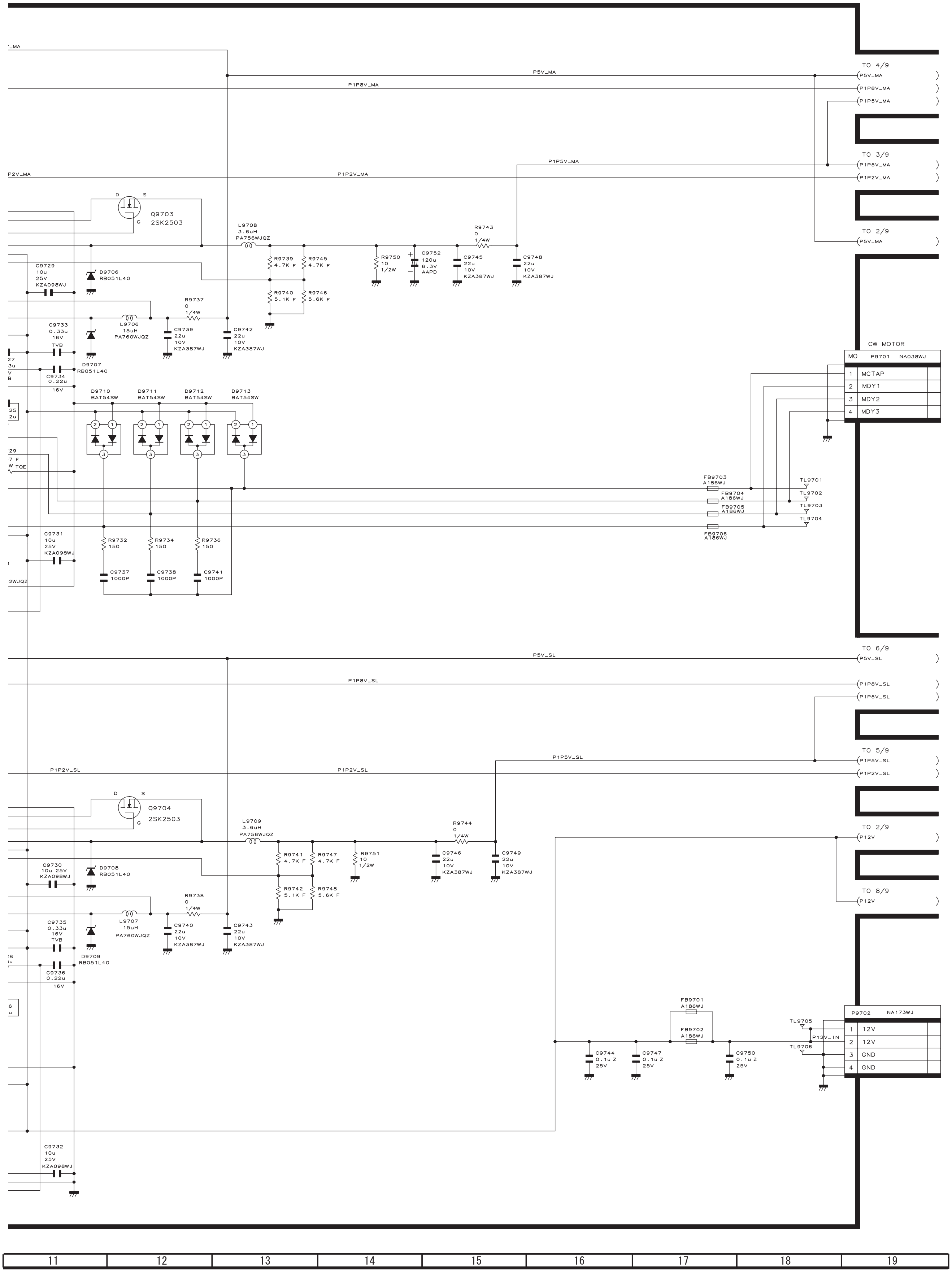
S_FLDATA2
S_FLDATA3
S_FLDATA4
S_FLDATA5
S_FLDATA6
S_FLDATA7
S_FLDATA8
S_FLDATA9
S_FLDATA10
S_FLDATA11
S_FLDATA12
S_FLDATA13
S_FLDATA14
S_FLDATA15
S_FLADDR0
S_FLADDR1
S_FLADDR2
S_FLADDR3
S_FLADDR4
S_FLADDR5
S_FLADDR6
S_FLADDR7
S_FLADDR8
S_FLADDR9
S_FLADDR10
S_FLADDR11
S_FLADDR12
S_FLADDR13
S_FLADDR14
S_FLADDR15
S_FLADDR16
S_FLADDR17
S_FLADDR18
S_FLADDR19
S_FLADDR20
S_FLADDR21
S_FL_CSZ0
S_FL_OEZ
S_FL_WEZ
SL_P3P3V
TO 2/9
PWRGOOD
TO 4/9
WRITEPROTECTZ
FB9603
A188WJ
SL_RLD_VTT
C9664
0.1u Z
25V
C9665
100u
6.3V
APF
C9666
0.1u Z
25V
R9617
0
R9618
0
R9616
10K
C9668
4.7u
25V
KZA384WJ
C9673
0.1u Z
25V
IC9603
TPS51100
VIN
S5
GND
S3
VTTREF
VLDOIN
VDDQSNS
VTT
PGND
VTTSNS
C9669
10u
6.3V
KZA117WJ
C9670
10u
6.3V
KZA117WJ
C9671
10u
6.3V
KZA117WJ
S_RLD_CK_P
S_RLD_CK_N
C9667
0.1u Z
25V
IC9602
IXB816WJ
A16
BYTE
GND
DQ15
DQ7
DQ14
DQ6
DQ13
DQ5
DQ12
DQ4
VCC
DQ11
DQ3
DQ10
DQ2
DQ9
DQ1
DQ8
DQ0
OE
GND
CE
A0
A15
A14
A13
A12
A11
A10
A9
A8
A19
A20
WE
RP
NC
WP
RB
A18
A17
A7
A6
A5
A4
A3
A2
A1
R9623
0
C9672
0.1u Z
25V
PWRGOOD
WRITEPROTECTZ
07MY
11
12
13
14
15
16
17
18
19

■FORMATTER Unit-7


DUNTKD858WEF0
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TO 2/9
P2P5V_MA
P3P3V_MA
P3P3V_SL
PWRGOOD
TO 3/9
USER_GPIO
P3P3V_MA
P2P5V_MA
CW_PWM
CW_TACH
MTR_RESETZ
M_SSP0_CLK
M_SSP0_CSZ0
M_SSP0_RXD
M_SSP0_TXD
PMDINTZ
POSENSE
M_OCLKA
TO 4/9
P2P5V_MA
TO 5/9
PMDINTZ
POSENSE
S_SSP0_CLK
S_SSP0_CSZ0
S_SSP0_RXD
S_SSP0_TXD
P3P3V_SL
P2P5V_SL
TO 6/9
P2P5V_SL
P5V_MA
Q9701
2SK2503
D
S
G
R9725
0
1/4W
P1P8V_MA
C9714
22u
10V
KZA387WJ
C9722
22u
10V
KZA387WJ
R9715
1.5K D
NCY
R9726
0
1/4W
P1P2V_MA
R9713
1.2K D
NCY
R9722
0
1/2W
C9715
22u
10V
KZA387WJ
C9720
22u
10V
KZA387WJ
POSENSE
PWRGOOD
PMDINTZ
R9718
2K F
1/10W
R9720
1K
R9723
0.1
1W
TW
R9706
3.3K
R9709
3.3K
C9710
100u
16V
APF
C9729
10u
25V
KZA098WJ
VBB3
F3SW
F2SW
F1SW
LX25
VBB4
LX33
GND
V3P3
V2P5
TRIM
RESETZ
PMDINTZ
PWRGOOD
POSENSE
GD2
FB2
FB1
FBC
VLIN1
ISEN
ISENK
GDC
LXC
V5
LX5
VBB2
VCP
VREG
GND
CP1
CP2
OUTC
OUTB
SENSE
CTAP
OUTA
DOUT
CLK
DIN
CSZ
TACH
OSC
GND
GMIN
VBB1
VMSW
VM
IC9701
IXB689WJ
PMD1000
MASTER
R9703
0
1/4W
C9701
22u
10V
KZA387WJ
C9705
22u
10V
KZA387WJ
L9701
33uH
PA774WJ
D9703
RB160M40
C9711
0.33u
16V
TVB
L9702
10uH
PA771WJ
D9704
RB051L40
R9702
0
1/4W
C9702
22u
10V
KZA387WJ
C9706
22u
10V
KZA387WJ
C9733
0.33u
16V
TVB
C9727
0.33u
16V
TVB
C9734
0.22u
16V
C9725
0.22u
16V
R9729
0.47 F
1/4W TQE
MTR_RESETZ
R9701
3.3K
P3P3V_MA
P2P5V_MA
R9708
3.3K
R9711
3.3K
P3P3V_MA
CW_PWM
R9707
10K
R9710
3.3K
C9709
0.1u Z
25V
P12V
M_SSP0_RXD
M_SSP0_CLK
M_SSP0_TXD
M_SSP0_CSZ0
CW_TACH
M_OCLKA
C9718
0.33u
16V
TVB
L9705
33uH
PA762WJQZ
C9751
10u
25V
KZA502WJQZ
C9731
10u
25V
KZA098WJ
D9705
RB051L40
C9724
10u
25V
KZA502WJQZ
P5V_SL
Q9702
2SK2503
R9727
0
1/4W
P1P8V_SL
C9716
22u
10V
KZA387WJ
C9723
22u
10V
KZA387WJ
R9716
1.5K D
NCY
R9728
0
1/4W
P1P2V_SL
R9714
1.2K D
NCY
C9717
22u
10V
KZA387WJ
C9721
22u
10V
KZA387WJ
POSENSE
PWRGOOD
PMDINTZ
R9719
2K F
1/10W
R9721
1K
R9724
0.1
1W
TW
C9712
100u
16V
APF
C9730
10u 25V
KZA098WJ
P3P3V_SL
R9704
0
1/4W
L9703
33uH
PA774WJ
C9703
22u
10V
KZA387WJ
C9707
22u
10V
KZA387WJ
D9701
RB160M40
C9713
0.33u
16V TVB
R9705
0
1/4W
L9704
10uH
PA771WJ
C9704
22u
10V
KZA387WJ
C9708
22u
10V
KZA387WJ
D9702
RB051L40
IC9702
IXB689WJ
PMD1000
SLAVE
C9735
0.33u
16V
TVB
C9728
0.33u
16V
TVB
C9736
0.22u
16V
C9726
0.22u
16V
MTR_RESETZ
R9712
3.3K
S_SSP0_RXD
S_SSP0_CLK
S_SSP0_TXD
S_SSP0_CSZ0
P12V
C9719
0.33u
16V
TVB
C9732
10u
25V
KZA098WJ


P5V_MA
P1P8V_MA
P1P2V_MA
P1P5V_MA
TO 4/9
P5V_MA
P1P8V_MA
P1P5V_MA
TO 3/9
P1P5V_MA
P1P2V_MA
TO 2/9
P5V_MA
Q9703
2SK2503
D
S
G
L9708
3.6uH
PA756WJQZ
R9743
0
1/4W
R9739
4.7K F
R9745
4.7K F
R9740
5.1K F
R9746
5.6K F
R9750
10
1/2W
C9752
120u
6.3V
AAPD
C9745
22u
10V
KZA387WJ
C9748
22u
10V
KZA387WJ
C9729
10u
25V
KZA098WJ
D9706
RB051L40
R9737
0
1/4W
L9706
15uH
PA760WJQZ
C9739
22u
10V
KZA387WJ
C9742
22u
10V
KZA387WJ
C9733
0.33u
16V
TVB
C9734
0.22u
16V
D9707
RB051L40
CW MOTOR
MO
P9701
NA038WJ
1 MCTAP
2 MDY1
3 MDY2
4 MDY3
D9710
BAT54SW
D9711
BAT54SW
D9712
BAT54SW
D9713
BAT54SW
FB9703
A186WJ
FB9704
A186WJ
FB9705
A186WJ
FB9706
A186WJ
TL9701
TL9702
TL9703
TL9704
C9731
10u
25V
KZA098WJ
R9732
150
R9734
150
R9736
150
C9737
1000P
C9738
1000P
C9741
1000P
P5V_SL
P1P8V_SL
TO 6/9
P5V_SL
P1P8V_SL
P1P5V_SL
TO 5/9
P1P5V_SL
P1P2V_SL
P1P2V_SL
Q9704
2SK2503
L9709
3.6uH
PA756WJQZ
R9744
0
1/4W
TO 2/9
P12V
R9741
4.7K F
R9747
4.7K F
R9751
10
1/2W
C9746
22u
10V
KZA387WJ
C9749
22u
10V
KZA387WJ
C9730
10u 25V
KZA098WJ
D9708
RB051L40
R9742
5.1K F
R9748
5.6K F
TO 8/9
P12V
R9738
0
1/4W
L9707
15uH
PA760WJQZ
C9740
22u
10V
KZA387WJ
C9743
22u
10V
KZA387WJ
C9735
0.33u
16V
TVB
C9736
0.22u
16V
D9709
RB051L40
FB9701
A186WJ
FB9702
A186WJ
TL9705
TL9706
P12V_IN
P9702
NA173WJ
1 12V
2 12V
3 GND
4 GND
C9744
0.1u Z
25V
C9747
0.1u Z
25V
C9750
0.1u Z
25V
C9732
10u
25V
KZA098WJ
11
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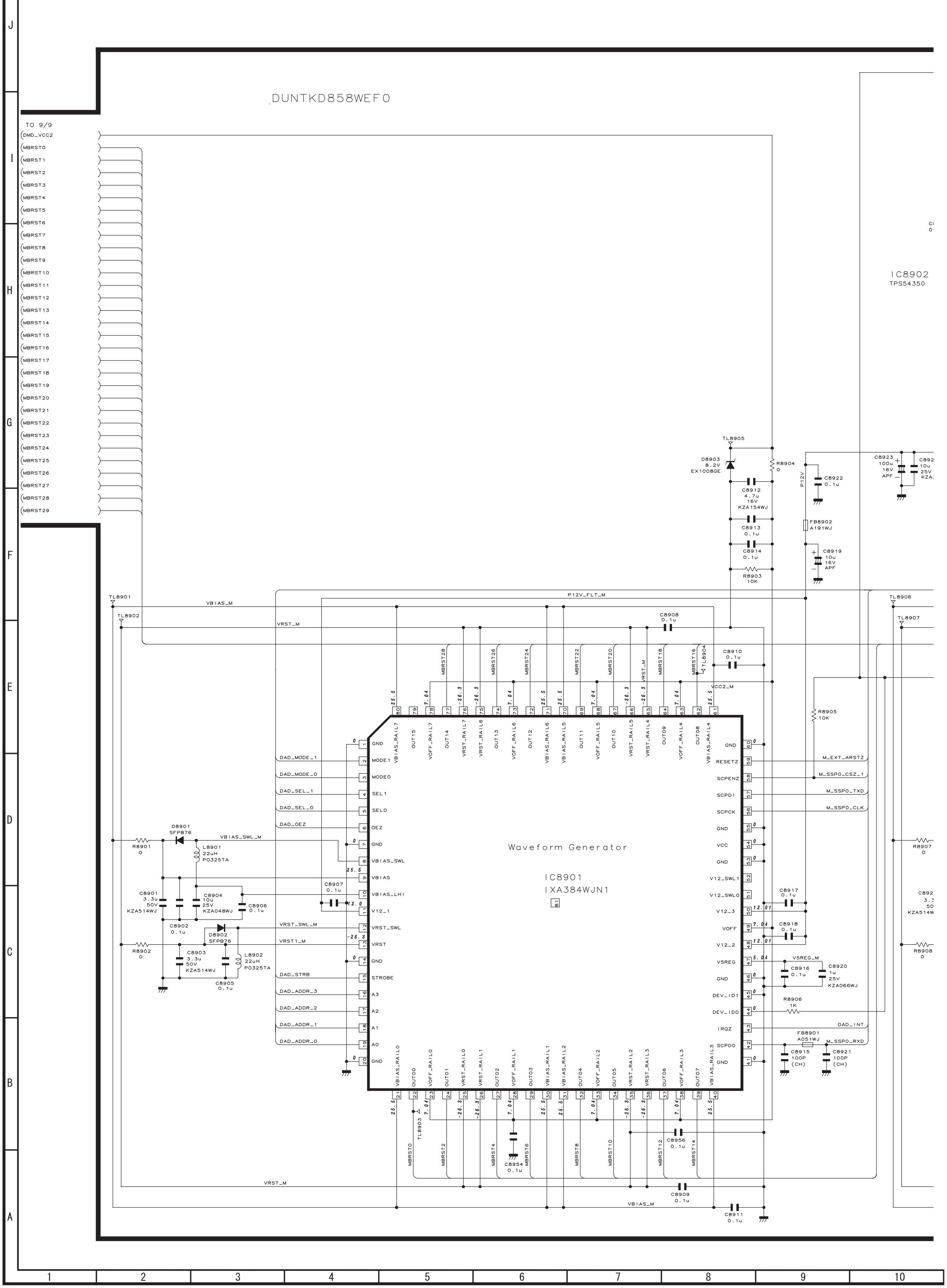
■FORMATTER Unit-8


DUNTKD858WEF0
TO 9/9
DMD_VCC2
MBRST0
MBRST1
MBRST2
MBRST3
MBRST4
MBRST5
MBRST6
MBRST7
MBRST8
MBRST9
MBRST10
MBRST11
MBRST12
MBRST13
MBRST14
MBRST15
MBRST16
MBRST17
MBRST18
MBRST19
MBRST20
MBRST21
MBRST22
MBRST23
MBRST24
MBRST25
MBRST26
MBRST27
MBRST28
MBRST29
IC8902
TPS54350
TL8905
D8903
8.2V
EX1008GE
R8904
0
C8912
4.7u
16V
KZA154WJ
C8913
0.1u
C8914
0.1u
R8903
10K
P12V
C8922
0.1u
FB8902
A191WJ
C8919
10u
16V
APF
C8923
100u
16V
APF
TL8901
TL8902
VBIAS_M
VRST_M
P12V_FLT_M
C8908
0.1u
C8910
0.1u
TL8904
VCC2_M
TL8906
TL8907
R8905
10K
IC8901
IXA384WJN1
Waveform Generator
DAD_MODE_1
DAD_MODE_0
DAD_SEL_1
DAD_SEL_0
DAD_OEZ
VBIAS_SWL_M
VRST_SWL_M
VRST1_M
DAD_STRB
DAD_ADDR_3
DAD_ADDR_2
DAD_ADDR_1
DAD_ADDR_0
GND
MODE1
MODE0
SEL1
SEL0
OEZ
VBIAS_SWL
VBIAS
VBIAS_LHI
V12_1
VRST_SWL
VRST
STROBE
A3
A2
A1
A0
RESETZ
SCPENZ
SCPDI
SCPCK
VCC
V12_SWL1
V12_SWL0
V12_3
VOFF
V12_2
V5REG
DEV_ID1
DEV_ID0
IRQZ
SCPDO
M_EXT_ARSTZ
M_SSP0_CSZ_1
M_SSP0_TXD
M_SSP0_CLK
M_SSP0_RXD
DAD_INT
V5REG_M
D8901
SFPB76
R8901
0
L8901
22uH
P0325TA
C8901
3.3u
50V
KZA514WJ
C8902
0.1u
C8904
10u
25V
KZA048WJ
C8906
0.1u
C8907
0.1u
D8902
SFPB76
R8902
0
C8903
3.3u
50V
KZA514WJ
L8902
22uH
P0325TA
C8905
0.1u
C8917
0.1u
C8918
0.1u
C8916
0.1u
C8920
1u
25V
KZA066WJ
R8906
1K
FB8901
A051WJ
C8915
100P
(CH)
C8921
100P
(CH)
R8907
0
R8908
0
TL8903
C8954
0.1u
C8956
0.1u
C8909
0.1u
C8911
0.1u
25.5
7.04
-26.3
12.0
12.01
5.04
J
I
H
G
F
E
D
C
B
A
1
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3
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6
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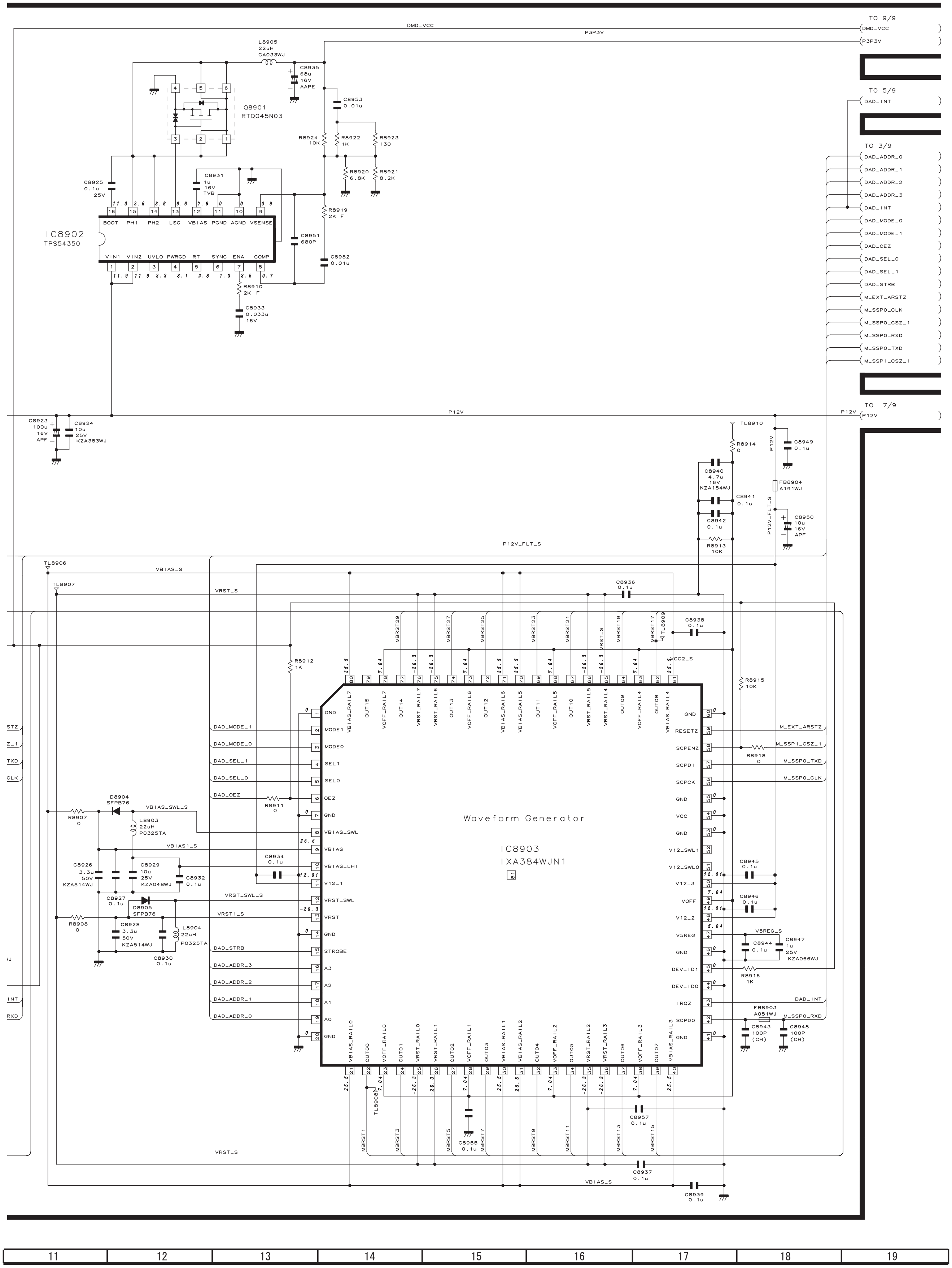
8
9
10


TO 9/9
DMD_VCC
P3P3V
TO 5/9
DAD_INT
TO 3/9
DAD_ADDR_0
DAD_ADDR_1
DAD_ADDR_2
DAD_ADDR_3
DAD_INT
DAD_MODE_0
DAD_MODE_1
DAD_OEZ
DAD_SEL_0
DAD_SEL_1
DAD_STRB
M_EXT_ARSTZ
M_SSP0_CLK
M_SSP0_CSZ_1
M_SSP0_RXD
M_SSP0_TXD
M_SSP1_CSZ_1
TO 7/9
P12V
L8905 22uH CA033WJ
C8935 68u 16V AAPE
C8953 0.01u
Q8901 RTQ045N03
R8924 10K
R8922 1K
R8923 130
R8920 6.8K
R8921 8.2K
C8925 0.1u 25V
C8931 1u 16V TVB
R8919 2K F
IC8902
TPS54350
BOOT PH1 PH2 LSG VBIAS PGND AGND VSENSE
VIN1 VIN2 UVLO PWRGD RT SYNC ENA COMP
C8951 680P
C8952 0.01u
R8910 2K F
C8933 0.033u 16V
C8923 100u 16V APF
C8924 10u 25V KZA383WJ
TL8910
R8914 0
C8949 0.1u
C8940 4.7u 16V KZA154WJ
C8941 0.1u
C8942 0.1u
FB8904 A191WJ
C8950 10u 16V APF
R8913 10K
P12V_FLT_S
TL8906
TL8907
VBIAS_S
VRST_S
C8936 0.1u
C8938 0.1u
TL8909
R8912 1K
R8915 10K
VCC2_S
Waveform Generator
IC8903
IXA384WJN1
GND
MODE1
MODE0
SEL1
SEL0
OEZ
VBIAS_SWL
VBIAS
VBIAS_LHI
V12_1
VRST_SWL
VRST
STROBE
A3
A2
A1
A0
RESETZ
SCPENZ
SCPDI
SCPCK
VCC
V12_SWL1
V12_SWL0
V12_3
VOFF
V12_2
V5REG
DEV_ID1
DEV_ID0
IRQZ
SCPDO
R8911 0
R8918 0
D8904 SFPB76
R8907 0
L8903 22uH P0325TA
VBIAS_SWL_S
VBIAS1_S
C8926 3.3u 50V KZA514WJ
C8929 10u 25V KZA048WJ
C8932 0.1u
C8934 0.1u
C8927 0.1u
D8905 SFPB76
VRST_SWL_S
VRST1_S
R8908 0
C8928 3.3u 50V KZA514WJ
L8904 22uH P0325TA
C8930 0.1u
C8945 0.1u
C8946 0.1u
V5REG_S
C8944 0.1u
C8947 1u 25V KZA066WJ
R8916 1K
FB8903 A051WJ
C8943 100P (CH)
C8948 100P (CH)
C8955 0.1u
C8957 0.1u
C8937 0.1u
C8939 0.1u
TL8908
MBRST1
MBRST3
MBRST5
MBRST7
MBRST9
MBRST11
MBRST13
MBRST15
MBRST17
MBRST19
MBRST21
MBRST23
MBRST25
MBRST27
MBRST29
11
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15
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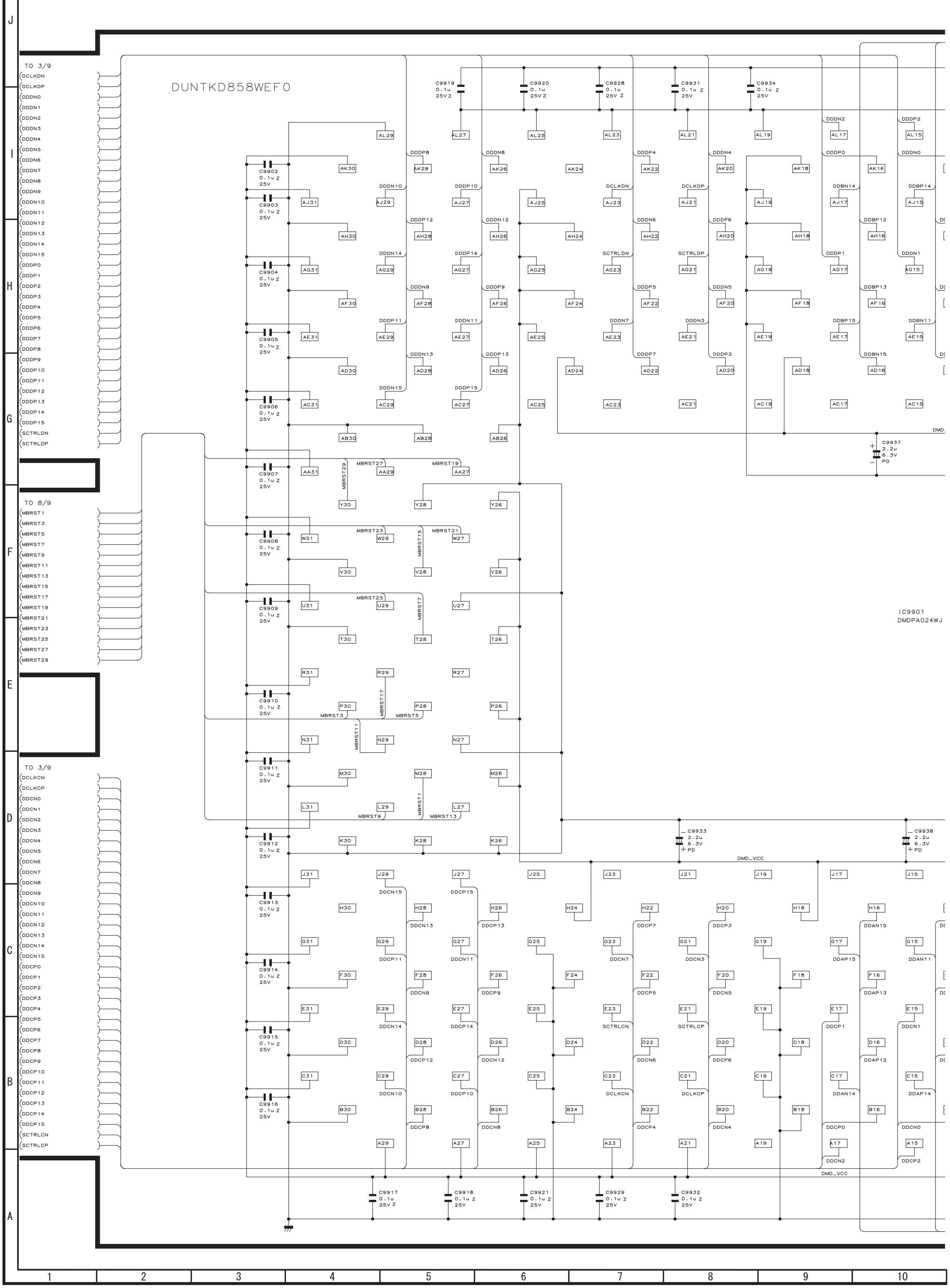
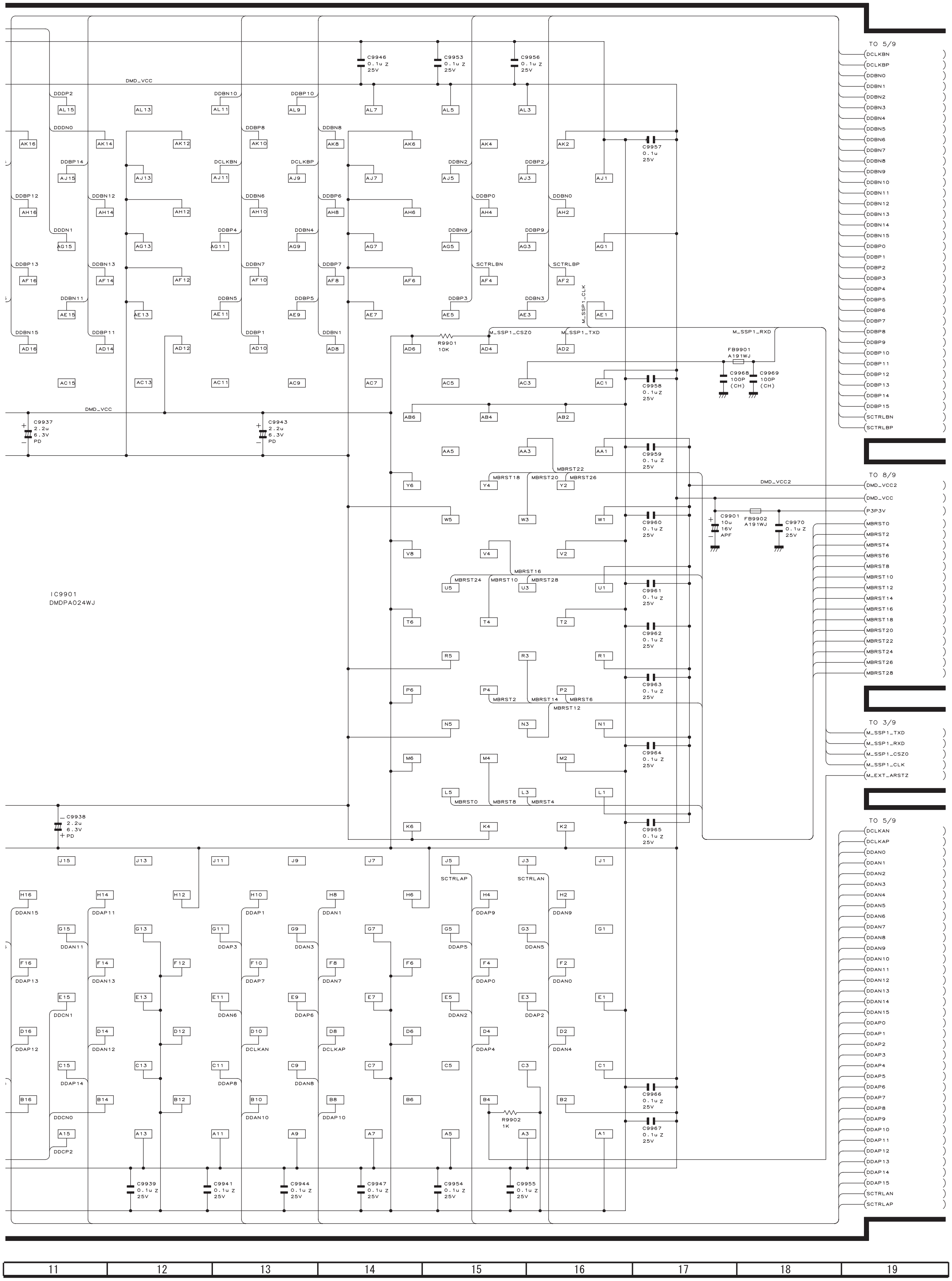
17
18
19

■FORMATTER Unit-9


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TO 3/9
DCLKDN
DCLKDP
DDDN0
DDDN1
DDDN2
DDDN3
DDDN4
DDDN5
DDDN6
DDDN7
DDDN8
DDDN9
DDDN10
DDDN11
DDDN12
DDDN13
DDDN14
DDDN15
DDDP0
DDDP1
DDDP2
DDDP3
DDDP4
DDDP5
DDDP6
DDDP7
DDDP8
DDDP9
DDDP10
DDDP11
DDDP12
DDDP13
DDDP14
DDDP15
SCTRLDN
SCTRLDP
TO 8/9
MBRST1
MBRST3
MBRST5
MBRST7
MBRST9
MBRST11
MBRST13
MBRST15
MBRST17
MBRST19
MBRST21
MBRST23
MBRST25
MBRST27
MBRST29
TO 3/9
DCLKCN
DCLKCP
DDCN0
DDCN1
DDCN2
DDCN3
DDCN4
DDCN5
DDCN6
DDCN7
DDCN8
DDCN9
DDCN10
DDCN11
DDCN12
DDCN13
DDCN14
DDCN15
DDCP0
DDCP1
DDCP2
DDCP3
DDCP4
DDCP5
DDCP6
DDCP7
DDCP8
DDCP9
DDCP10
DDCP11
DDCP12
DDCP13
DDCP14
DDCP15
SCTRLCN
SCTRLCP
DUNTKD858WEF0
C9919 0.1u 25V Z
C9920 0.1u 25V Z
C9928 0.1u 25V Z
C9931 0.1u Z 25V
C9934 0.1u Z 25V
C9902 0.1u Z 25V
C9903 0.1u Z 25V
C9904 0.1u Z 25V
C9905 0.1u Z 25V
C9906 0.1u Z 25V
C9907 0.1u Z 25V
C9908 0.1u Z 25V
C9909 0.1u Z 25V
C9910 0.1u Z 25V
C9911 0.1u Z 25V
C9912 0.1u Z 25V
C9913 0.1u Z 25V
C9914 0.1u Z 25V
C9915 0.1u Z 25V
C9916 0.1u Z 25V
C9917 0.1u 25V Z
C9918 0.1u Z 25V
C9921 0.1u Z 25V
C9929 0.1u Z 25V
C9932 0.1u Z 25V
C9937 2.2u 6.3V PD
C9933 2.2u 6.3V PD
C9938 2.2u 6.3V PD
IC9901
DMDPA024WJ
DMD_VCC
DMD_VCC
DMD_


IC9901
DMDPA024WJ
DMD_VCC
DMD_VCC2
C9946 0.1u Z 25V
C9953 0.1u Z 25V
C9956 0.1u Z 25V
C9957 0.1u 25V
C9958 0.1u Z 25V
C9959 0.1u Z 25V
C9960 0.1u Z 25V
C9961 0.1u Z 25V
C9962 0.1u Z 25V
C9963 0.1u Z 25V
C9964 0.1u Z 25V
C9965 0.1u Z 25V
C9966 0.1u Z 25V
C9967 0.1u Z 25V
C9937 2.2u 6.3V PD
C9943 2.2u 6.3V PD
C9938 2.2u 6.3V PD
C9939 0.1u Z 25V
C9941 0.1u Z 25V
C9944 0.1u Z 25V
C9947 0.1u Z 25V
C9954 0.1u Z 25V
C9955 0.1u Z 25V
C9968 100P (CH)
C9969 100P (CH)
C9901 10u 16V APF
C9970 0.1u Z 25V
FB9901 A191WJ
FB9902 A191WJ
R9901 10K
R9902 1K
M_SSP1_CLK
M_SSP1_CSZ0
M_SSP1_TXD
M_SSP1_RXD
MBRST0
MBRST2
MBRST4
MBRST6
MBRST8
MBRST10
MBRST12
MBRST14
MBRST16
MBRST18
MBRST20
MBRST22
MBRST24
MBRST26
MBRST28
SCTRLAP
SCTRLAN
SCTRLBN
SCTRLBP
DDDP2
DDDN0
DDDN1
DDCN1
DDCN0
DDCP2
TO 5/9
DCLKBN
DCLKBP
DDBN0
DDBN1
DDBN2
DDBN3
DDBN4
DDBN5
DDBN6
DDBN7
DDBN8
DDBN9
DDBN10
DDBN11
DDBN12
DDBN13
DDBN14
DDBN15
DDBP0
DDBP1
DDBP2
DDBP3
DDBP4
DDBP5
DDBP6
DDBP7
DDBP8
DDBP9
DDBP10
DDBP11
DDBP12
DDBP13
DDBP14
DDBP15
SCTRLBN
SCTRLBP
TO 8/9
DMD_VCC2
DMD_VCC
P3P3V
MBRST0
MBRST2
MBRST4
MBRST6
MBRST8
MBRST10
MBRST12
MBRST14
MBRST16
MBRST18
MBRST20
MBRST22
MBRST24
MBRST26
MBRST28
TO 3/9
M_SSP1_TXD
M_SSP1_RXD
M_SSP1_CSZ0
M_SSP1_CLK
M_EXT_ARSTZ
TO 5/9
DCLKAN
DCLKAP
DDAN0
DDAN1
DDAN2
DDAN3
DDAN4
DDAN5
DDAN6
DDAN7
DDAN8
DDAN9
DDAN10
DDAN11
DDAN12
DDAN13
DDAN14
DDAN15
DDAP0
DDAP1
DDAP2
DDAP3
DDAP4
DDAP5
DDAP6
DDAP7
DDAP8
DDAP9
DDAP10
DDAP11
DDAP12
DDAP13
DDAP14
DDAP15
SCTRLAN
SCTRLAP
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12
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16
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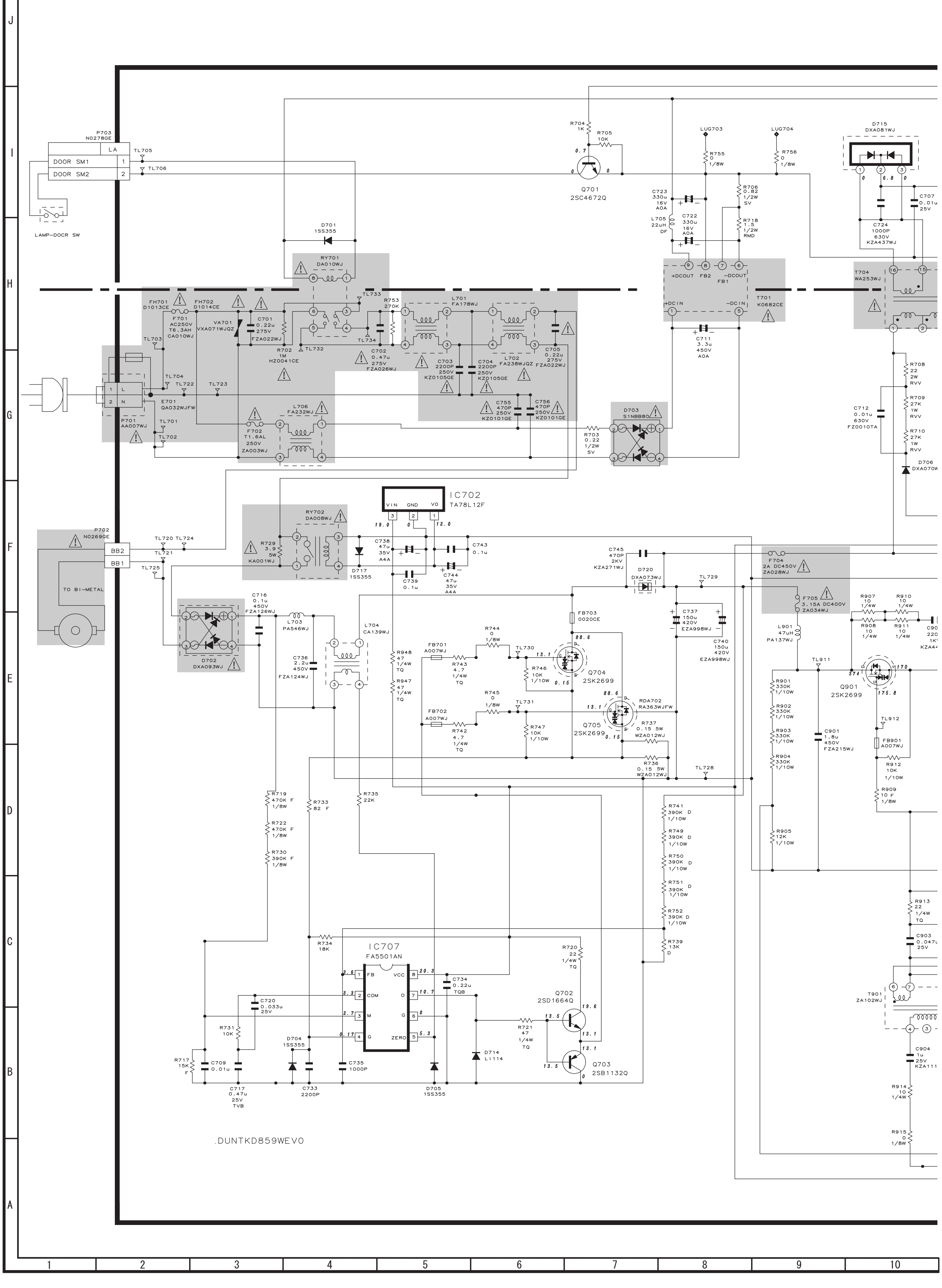
18
19

■POWER/BULLAST UNIT


J
I
H
G
F
E
D
C
B
A
1
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3
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5
6
7
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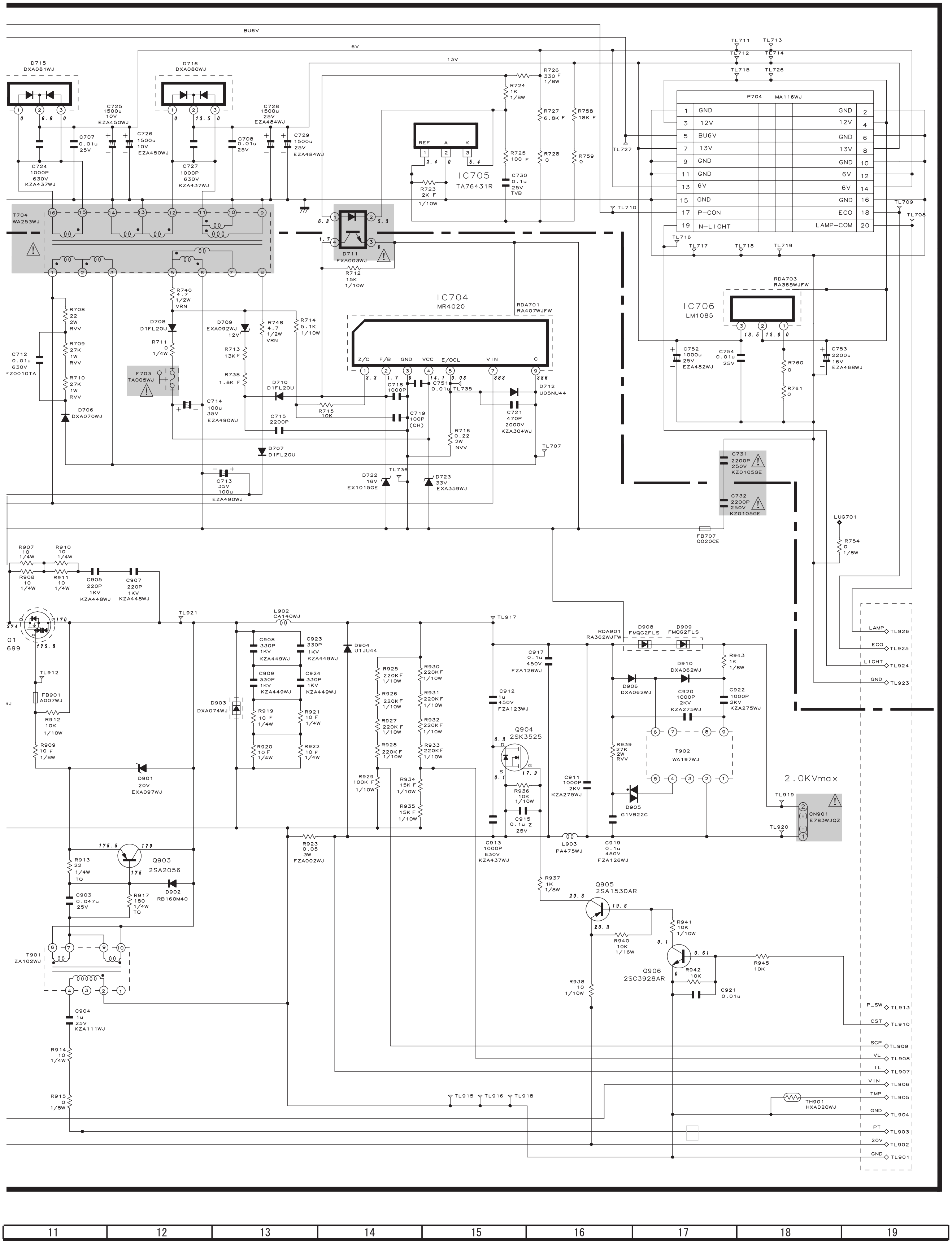
9
10
P703
N0278GE
LA
DOOR SM1
DOOR SM2
TL705
TL706
LAMP-DOCR SW
R704 1K
R705 10K
Q701 2SC4672Q
LUG703
LUG704
R755 0 1/8W
R756 0 1/8W
D715 DXA081WJ
C723 330u 16V A0A
L705 22uH DF
C722 330u 16V A0A
R706 0.82 1/2W SV
R718 1.5 1/2W RMD
C707 0.01u 25V
C724 1000P 630V KZA437WJ
D701 1SS355
RY701 DA010WJ
+DCOUT FB2 -DCOUT FB1
+DCIN -DCIN
T701 K0682CE
T704 WA253WJ
FH701 D1013CE
FH702 D1014CE
F701 AC250V T6.3AH CA010WJ
VA701 VXA071WJQZ
C701 0.22u 275V FZA022WJ
TL733
R753 270K
L701 FA178WJ
TL703
R702 1M HZ0041CE
TL732
TL734
C702 0.47u 275V FZA026WJ
C703 2200P 250V KZ0105GE
C704 2200P 250V KZ0105GE
L702 FA238WJQZ
C705 0.22u 275V FZA022WJ
C711 3.3u 450V A0A
R708 22 2W RVV
R709 27K 1W RVV
R710 27K 1W RVV
C712 0.01u 630V FZ0010TA
D706 DXA070W
TL704
TL722
TL723
E701 QA032WJFW
P701 AA007WJ
TL701
TL702
L706 FA232WJ
F702 T1.6AL 250V ZA003WJ
C755 470P 250V KZ0101GE
C756 470P 250V KZ0101GE
R703 0.22 1/2W SV
D703 S1NBB80
IC702 TA78L12F
VIN GND VO
19.0
0
12.0
P702 N0269GE
BB2
BB1
TO BI-METAL
TL720 TL724
TL721
TL725
RY702 DA008WJ
R729 3.9 5W KA001WJ
C738 47u 35V A4A
D717 1SS355
C739 0.1u
C744 47u 35V A4A
C743 0.1u
C745 470P 2KV KZA271WJ
D720 DXA073WJ
TL729
F704 2A DC450V ZA028WJ
F705 3.15A DC400V ZA034WJ
C716 0.1u 450V FZA126WJ
L703 PA546WJ
L704 CA139WJ
D702 DXA093WJ
C736 2.2u 450V FZA124WJ
R948 47 1/4W TQ
R947 47 1/4W TQ
FB701 A007WJ
R744 0 1/8W
TL730
R743 4.7 1/4W TQ
R746 10K 1/10W
Q704 2SK2699
FB703 0020CE
88.6
13.1
0.15
C737 150u 420V EZA998WJ
C740 150u 420V EZA998WJ
L901 47uH PA137WJ
R907 10 1/4W
R910 10 1/4W
R908 10 1/4W
R911 10 1/4W
TL911
Q901 2SK2699
374
170
175.8
R745 0 1/8W
TL731
FB702 A007WJ
R742 4.7 1/4W TQ
R747 10K 1/10W
Q705 2SK2699
RDA702 RA363WJFW
R737 0.15 5W WZA012WJ
R736 0.15 5W WZA012WJ
TL728
R901 330K 1/10W
R902 330K 1/10W
R903 330K 1/10W
R904 330K 1/10W
C901 1.8u 450V FZA215WJ
TL912
FB901 A007WJ
R912 10K 1/10W
R909 10 F 1/8W
R719 470K F 1/8W
R733 82 F
R735 22K
R722 470K F 1/8W
R730 390K F 1/8W
R741 390K D 1/10W
R749 390K D 1/10W
R750 390K D 1/10W
R751 390K D 1/10W
R752 390K D 1/10W
R739 13K D
R905 12K 1/10W
R913 22 1/4W TQ
C903 0.047u 25V
R734 18K
IC707 FA5501AN
FB VCC
COM O
M G
G ZERO
3.6
20.3
3.3
10.7
2.7
0
0.17
5.3
C734 0.22u TQB
R720 22 1/4W TQ
Q702 2SD1664Q
19.6
13.5
13.1
R721 47 1/4W TQ
Q703 2SB1132Q
D714 L1114
C720 0.033u 25V
R731 10K
D704 1SS355
R717 15K F
C709 0.01u
C717 0.47u 25V TVB
C733 2200P
C735 1000P
D705 1SS355
T901 ZA102WJ
C904 1u 25V KZA111
R914 10 1/4W
R915 0 1/8W
.DUNTKD859WEV0


BU6V
6V
13V
D715
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D716
DXA080WJ
C725
1500u
10V
EZA450WJ
C728
1500u
25V
EZA484WJ
C707
0.01u
25V
C726
1500u
10V
EZA450WJ
C708
0.01u
25V
C729
1500u
25V
EZA484WJ
C724
1000P
630V
KZA437WJ
C727
1000P
630V
KZA437WJ
T704
WA253WJ
R726
330 F
1/8W
R724
1K
1/8W
R727
6.8K F
R758
18K F
R725
100 F
R728
0
R759
0
C730
0.1u
25V
TVB
IC705
TA76431R
REF
A
K
R723
2K F
1/10W
D711
FXA003WJ
R712
15K
1/10W
IC704
MR4020
RDA701
RA407WJFW
Z/C
F/B
GND
VCC
E/OCL
VIN
C
R740
4.7
1/2W
VRN
R708
22
2W
RVV
R709
27K
1W
RVV
R710
27K
1W
RVV
C712
0.01u
630V
FZ0010TA
D706
DXA070WJ
D708
D1FL20U
R711
0
1/4W
F703
TA005WJ
D709
EXA092WJ
12V
R748
4.7
1/2W
VRN
R714
5.1K
1/10W
R713
13K F
R738
1.8K F
D710
D1FL20U
C714
100u
35V
EZA490WJ
R715
10K
C718
1000P
C751
0.01u
TL735
C719
100P
(CH)
C715
2200P
C721
470P
2000V
KZA304WJ
D712
U05NU44
R716
0.22
2W
NVV
TL707
D707
D1FL20U
C713
35V
100u
EZA490WJ
D722
16V
EX1015GE
TL736
D723
33V
EXA359WJ
P704
MA116WJ
1 GND
GND 2
3 12V
12V 4
5 BU6V
GND 6
7 13V
13V 8
9 GND
GND 10
11 GND
6V 12
13 6V
6V 14
15 GND
GND 16
17 P-CON
ECO 18
19 N-LIGHT
LAMP-COM 20
TL711
TL713
TL712
TL714
TL715
TL726
TL727
TL710
TL709
TL708
TL716
TL717
TL718
TL719
RDA703
RA365WJFW
IC706
LM1085
C752
1000u
25V
EZA482WJ
C754
0.01u
25V
R760
0
R761
0
C753
2200u
16V
EZA468WJ
C731
2200P
250V
KZ0105GE
C732
2200P
250V
KZ0105GE
LUG701
R754
0
1/8W
FB707
0020CE
R907
10
1/4W
R910
10
1/4W
R908
10
1/4W
R911
10
1/4W
C905
220P
1KV
KZA448WJ
C907
220P
1KV
KZA448WJ
TL921
TL912
FB901
A007WJ
R912
10K
1/10W
R909
10 F
1/8W
L902
CA140WJ
C908
330P
1KV
KZA449WJ
C923
330P
1KV
KZA449WJ
C909
330P
1KV
KZA449WJ
C924
330P
1KV
KZA449WJ
D903
DXA074WJ
R919
10 F
1/4W
R921
10 F
1/4W
R920
10 F
1/4W
R922
10 F
1/4W
D901
20V
EXA097WJ
D904
U1JU44
R925
220K F
1/10W
R926
220K F
1/10W
R927
220K F
1/10W
R928
220K F
1/10W
R929
100K F
1/10W
R930
220K F
1/10W
R931
220K F
1/10W
R932
220K F
1/10W
R933
220K F
1/10W
R934
15K F
1/10W
R935
15K F
1/10W
TL917
C917
0.1u
450V
FZA126WJ
C912
1u
450V
FZA123WJ
Q904
2SK3525
R936
10K
1/10W
C915
0.1u Z
25V
C911
1000P
2KV
KZA275WJ
C913
1000P
630V
KZA437WJ
L903
PA475WJ
C919
0.1u
450V
FZA126WJ
RDA901
RA362WJFW
D908
FMQG2FLS
D909
FMQG2FLS
R943
1K
1/8W
D910
DXA062WJ
D906
DXA062WJ
C920
1000P
2KV
KZA275WJ
C922
1000P
2KV
KZA275WJ
R939
27K
2W
RVV
T902
WA197WJ
D905
G1VB22C
2.0KVmax
TL919
TL920
CN901
E783WJQZ
R923
0.05
3W
FZA002WJ
Q903
2SA2056
R913
22
1/4W
TQ
C903
0.047u
25V
R917
180
1/4W
TQ
D902
RB160M40
T901
ZA102WJ
C904
1u
25V
KZA111WJ
R914
10
1/4W
R915
0
1/8W
R937
1K
1/8W
Q905
2SA1530AR
R941
10K
1/10W
R940
10K
1/16W
Q906
2SC3928AR
R942
10K
R945
10K
C921
0.01u
R938
10
1/10W
TL915
TL916
TL918
TH901
HXA020WJ
LAMP TL926
ECO TL925
LIGHT TL924
GND TL923
P_SW TL913
CST TL910
SCP TL909
VL TL908
IL TL907
VIN TL906
TMP TL905
GND TL904
PT TL903
20V TL902
GND TL901
11
12
13
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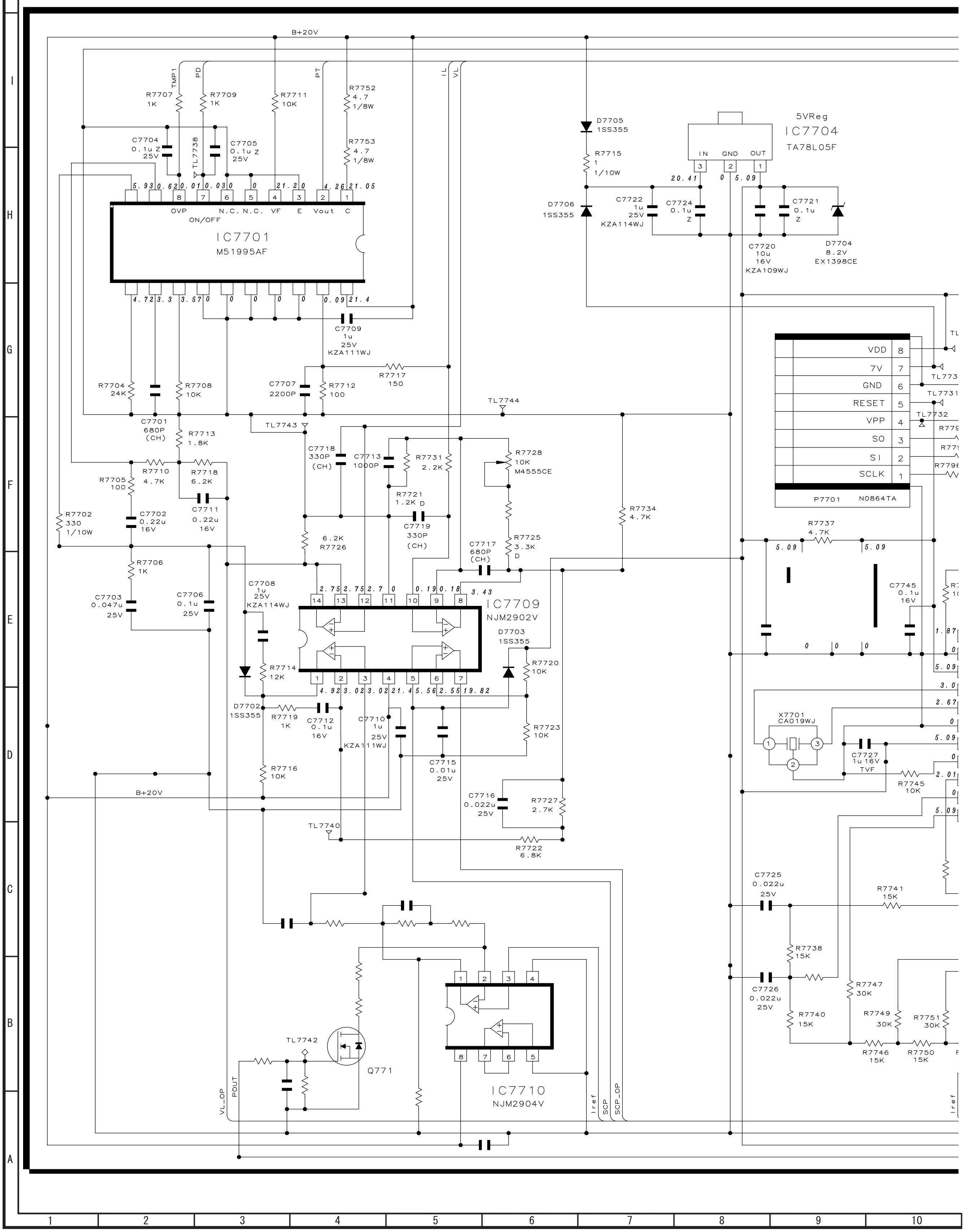
19

■BALLAST CONTROL Unit


J
I
H
G
F
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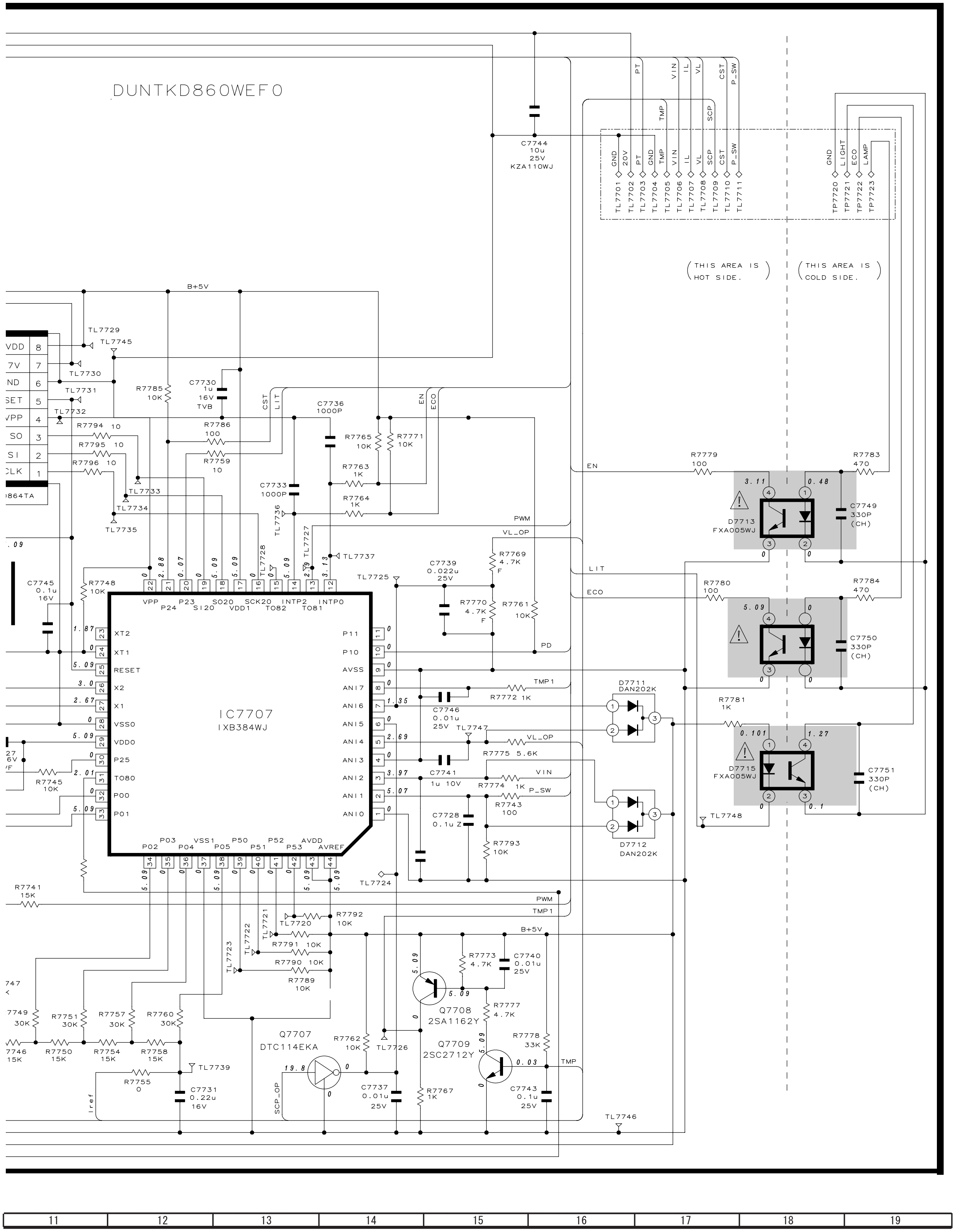
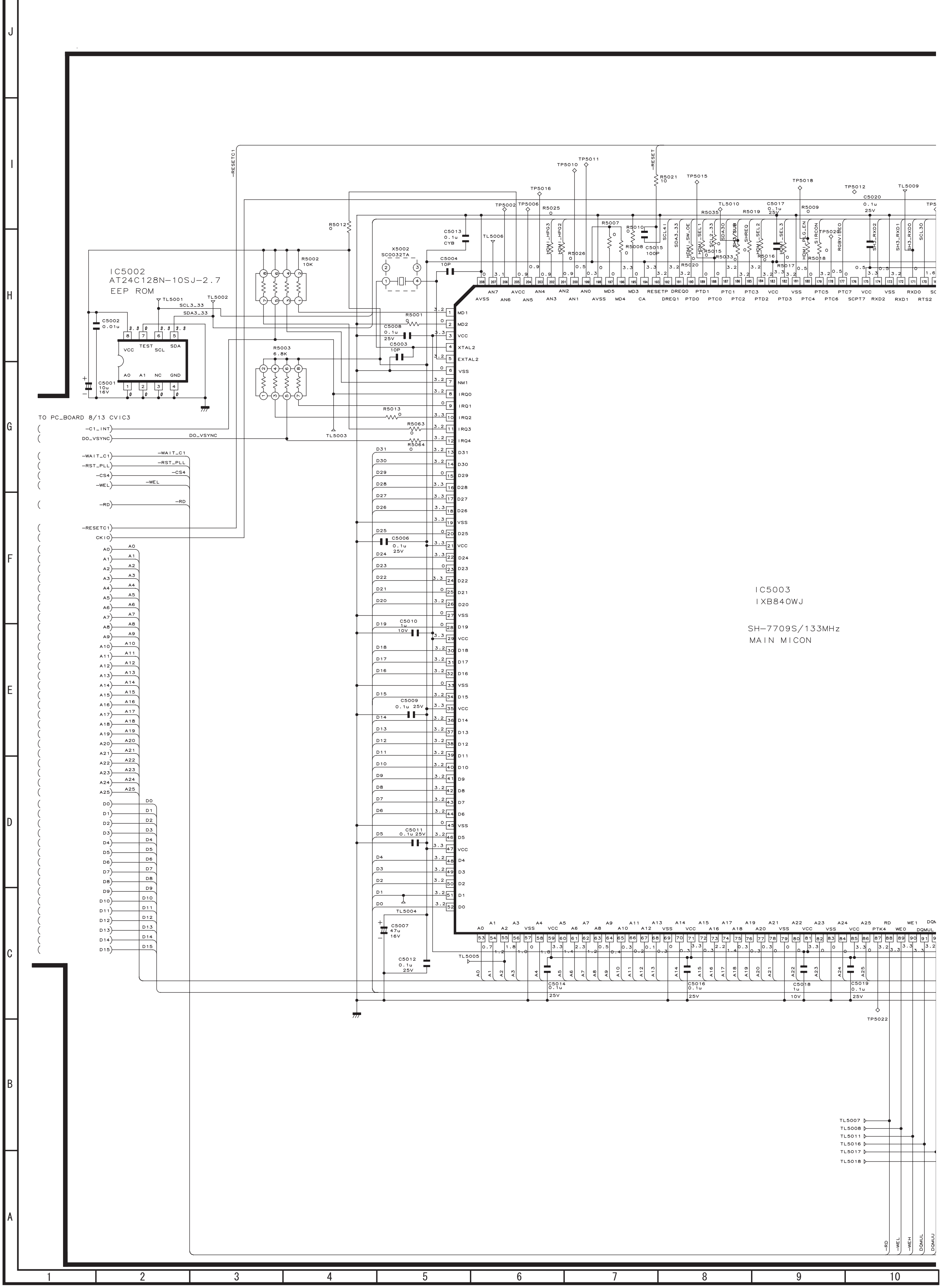
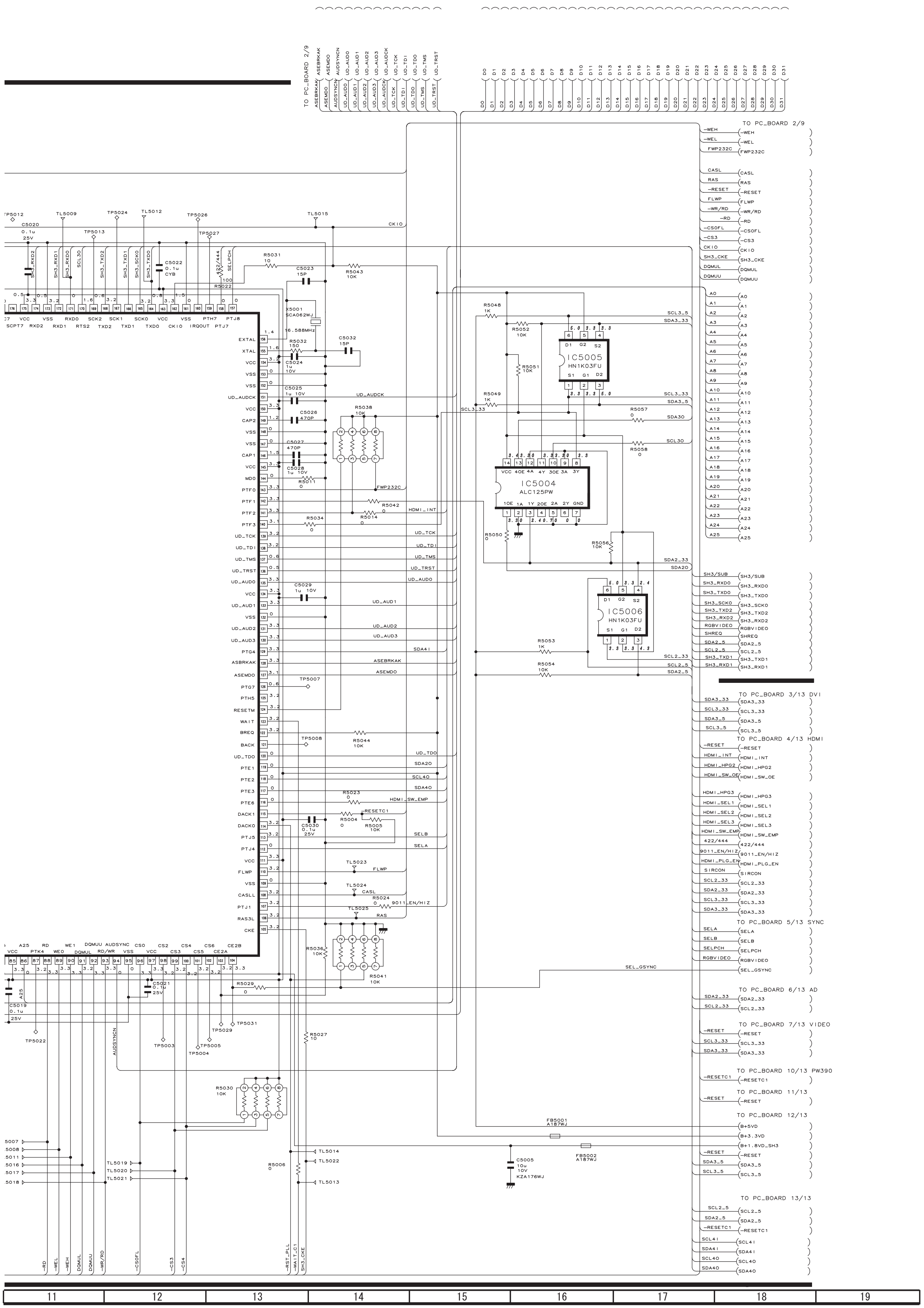
D
C
B
A
1
2
3
4
5
6
7
8
9
10
B+20V
TMP1
PD
PT
IL
VL
R7707 1K
R7709 1K
R7711 10K
R7752 4.7 1/8W
R7753 4.7 1/8W
C7704 0.1u Z 25V
TL7738
C7705 0.1u Z 25V
5.93
0.62
0.01
0.03
0
0
21.2
0
4.26
21.05
OVP
ON/OFF
N.C.
N.C.
VF
E
Vout
C
IC7701
M51995AF
4.72
3.3
3.57
0
0
0
0
0
0.09
21.4
C7709 1u 25V KZA111WJ
R7717 150
R7704 24K
R7708 10K
C7707 2200P
R7712 100
C7701 680P (CH)
TL7744
TL7743
R7713 1.8K
C7718 330P (CH)
C7713 1000P
R7731 2.2K
R7728 10K M4555CE
R7710 4.7K
R7718 6.2K
R7705 100
C7711 0.22u 16V
R7721 1.2K D
C7719 330P (CH)
R7702 330 1/10W
C7702 0.22u 16V
6.2K R7726
R7725 3.3K D
R7734 4.7K
C7717 680P (CH)
R7706 1K
C7708 1u 25V KZA114WJ
2.75
2.75
2.7
0
0.19
0.18
3.43
C7703 0.047u 25V
C7706 0.1u 25V
IC7709
NJM2902V
D7703 1SS355
R7720 10K
R7714 12K
4.92
3.02
3.02
21.4
5.56
2.55
19.82
D7702 1SS355
R7719 1K
C7712 0.1u 16V
C7710 1u 25V KZA111WJ
R7723 10K
R7716 10K
C7715 0.01u 25V
C7716 0.022u 25V
R7727 2.7K
B+20V
TL7740
R7722 6.8K
TL7742
Q771
VL_OP
POUT
IC7710
NJM2904V
Iref
SCP
SCP_OP
D7705 1SS355
R7715 1 1/10W
5VReg
IC7704
TA78L05F
IN
GND
OUT
20.41
0
5.09
D7706 1SS355
C7722 1u 25V KZA114WJ
C7724 0.1u Z
C7721 0.1u Z
C7720 10u 16V KZA109WJ
D7704 8.2V EX1398CE
VDD 8
7V 7
GND 6
RESET 5
VPP 4
SO 3
SI 2
SCLK 1
P7701 N0864TA
TL773
TL7731
TL7732
R779
R779
R7796
R7737 4.7K
5.09
5.09
C7745 0.1u 16V
1.87
0
0
0
0
5.09
3.0
2.67
0
5.09
0
2.01
0
5.09
X7701 CA019WJ
C7727 1u 16V TVF
R7745 10K
C7725 0.022u 25V
R7741 15K
R7738 15K
C7726 0.022u 25V
R7747 30K
R7740 15K
R7749 30K
R7751 30K
R7746 15K
R7750 15K
Iref

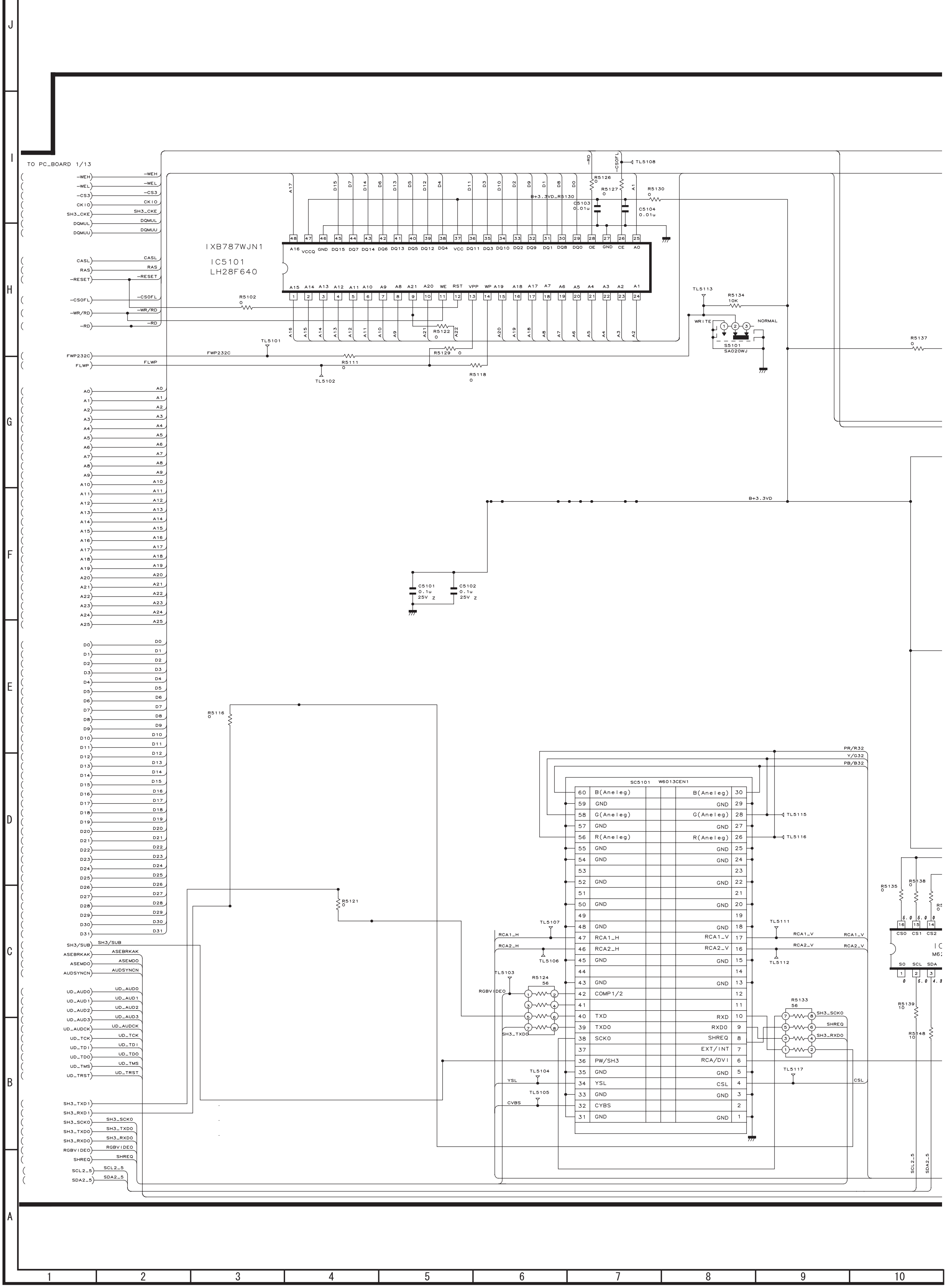

DUNTKD860WEF0
C7744
10u
25V
KZA110WJ
PT
VIN
IL
VL
CST
P_SW
TMP
SCP
GND
20V
PT
GND
TMP
VIN
IL
VL
SCP
CST
P_SW
TL7701
TL7702
TL7703
TL7704
TL7705
TL7706
TL7707
TL7708
TL7709
TL7710
TL7711
GND
LIGHT
ECO
LAMP
TP7720
TP7721
TP7722
TP7723
THIS AREA IS HOT SIDE.
THIS AREA IS COLD SIDE.
B+5V
TL7729
TL7745
VDD 8
7V 7
ND 6
SET 5
VPP 4
SO 3
SI 2
CLK 1
864TA
TL7730
TL7731
TL7732
R7794 10
R7795 10
R7796 10
TL7733
TL7734
TL7735
R7785
10K
C7730
1u
16V
TVB
R7786
100
R7759
10
CST
LIT
C7736
1000P
EN
ECO
R7765
10K
R7771
10K
R7763
1K
C7733
1000P
R7764
1K
TL7736
TL7728
TL7727
TL7737
PWM
VL_OP
R7769
4.7K
F
C7739
0.022u
25V
TL7725
R7770
4.7K
F
R7761
10K
PD
C7745
0.1u
16V
R7748
10K
IC7707
IXB384WJ
VPP P24 P23 SI20 SO20 VDD1 SCK20 TO82 INTP2 TO81 INTP0
XT2
XT1
RESET
X2
X1
VSS0
VDD0
P25
TO80
P00
P01
P11
P10
AVSS
ANI7
ANI6
ANI5
ANI4
ANI3
ANI2
ANI1
ANI0
P02 P03 P04 VSS1 P05 P50 P51 P52 P53 AVDD AVREF
2.88
0.07
0
5.09
5.09
0
2.9
3.13
1.87
0
5.09
3.0
2.67
0
5.09
0
2.01
0
5.09
1.35
2.69
3.97
5.07
R7745
10K
TMP1
R7772 1K
C7746
0.01u
25V
TL7747
VL_OP
R7775 5.6K
C7741
1u 10V
VIN
R7774 1K
P_SW
R7743
100
C7728
0.1u Z
R7793
10K
TL7724
EN
R7779
100
R7783
470
3.11
0.48
D7713
FXA005WJ
C7749
330P
(CH)
LIT
ECO
R7780
100
R7784
470
5.09
C7750
330P
(CH)
D7711
DAN202K
D7712
DAN202K
R7781
1K
0.101
1.27
D7715
FXA005WJ
C7751
330P
(CH)
0.1
TL7748
R7741
15K
PWM
TMP1
B+5V
R7792
10K
TL7720
TL7721
TL7722
TL7723
R7791 10K
R7790 10K
R7789
10K
R7773
4.7K
C7740
0.01u
25V
Q7708
2SA1162Y
R7777
4.7K
R7778
33K
Q7709
2SC2712Y
0.03
TMP
C7743
0.1u
25V
Q7707
DTC114EKA
R7762
10K
TL7726
19.8
SCP_OP
C7737
0.01u
25V
R7767
1K
TL7746
747
7749
30K
R7751
30K
R7757
30K
R7760
30K
7746
15K
R7750
15K
R7754
15K
R7758
15K
TL7739
R7755
0
C7731
0.22u
16V
Iref
11
12
13
14
15
16
17
18
19

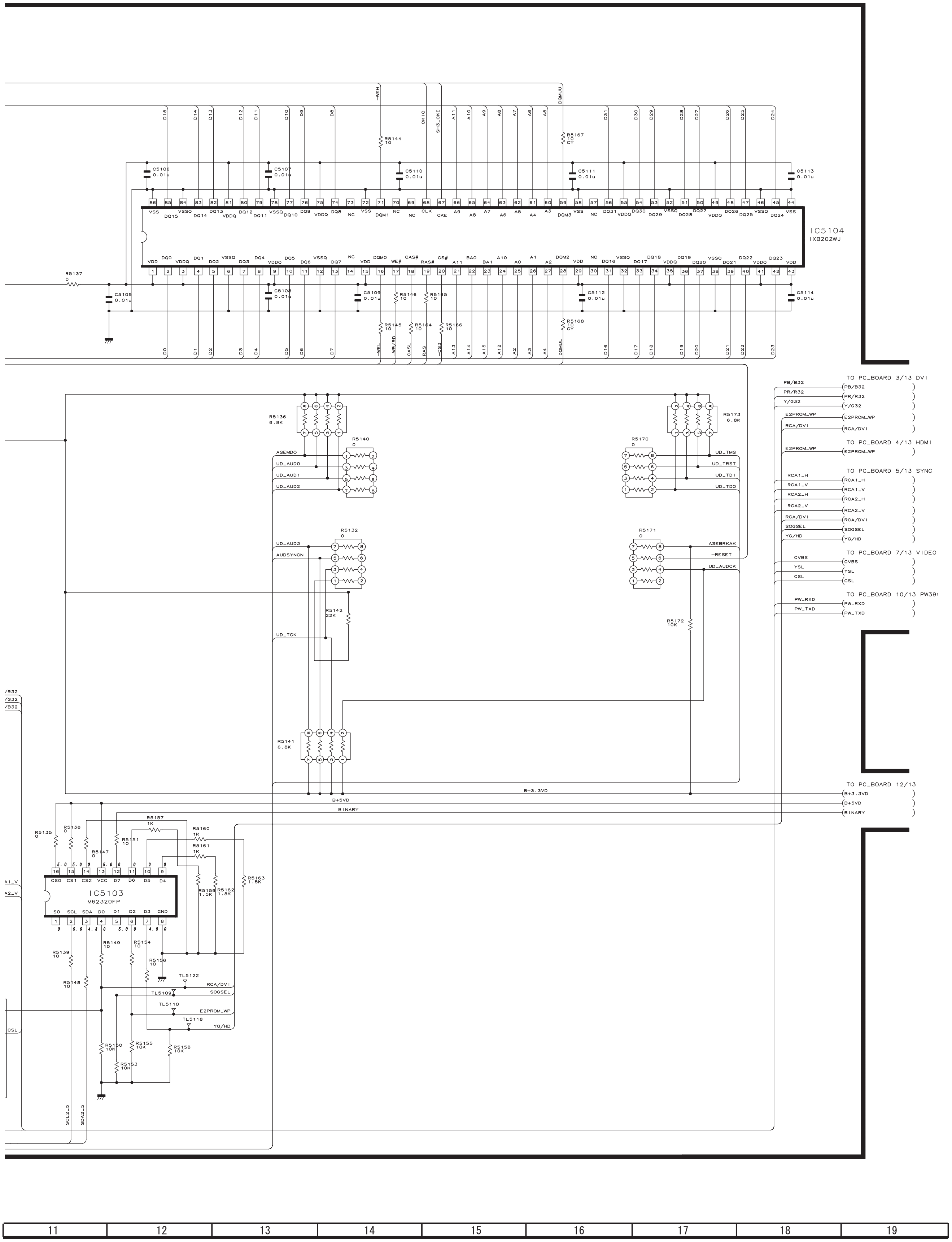
■PC I/F Unit-1


IC5002
AT24C128N-10SJ-2.7
EEP ROM
IC5003
IXB840WJ
SH-7709S/133MHz
MAIN MICON
TO PC_BOARD 8/13 CVIC3
-C1_INT
DO_VSYNC
-WAIT_C1
-RST_PLL
-CS4
-WEL
-RD
-RESETC1
CKIO
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22
A23
A24
A25
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
X5002
SC0032TA
R5002
10K
R5003
6.8K
R5001
R5012
R5013
R5063
R5064
C5001
10u
16V
C5002
0.01u
C5003
10P
C5004
10P
C5006
0.1u
25V
C5007
47u
16V
C5008
C5009
C5010
C5011
C5012
C5013
0.1u
CYB
C5014
C5015
100P
C5016
C5017
C5018
C5019
C5020
TL5001
TL5002
TL5003
TL5004
TL5005
TL5006
TL5007
TL5008
TL5009
TL5010
TL5011
TL5016
TL5017
TL5018
TP5002
TP5006
TP5010
TP5011
TP5012
TP5015
TP5016
TP5018
TP5022
SCL3_33
SDA3_33
-RESETC1
-RESET
MD1
MD2
VCC
XTAL2
EXTAL2
VSS
NMI
IRQ0
IRQ1
IRQ2
IRQ3
IRQ4
-RD
-WEL
-WEH
DQMUU
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

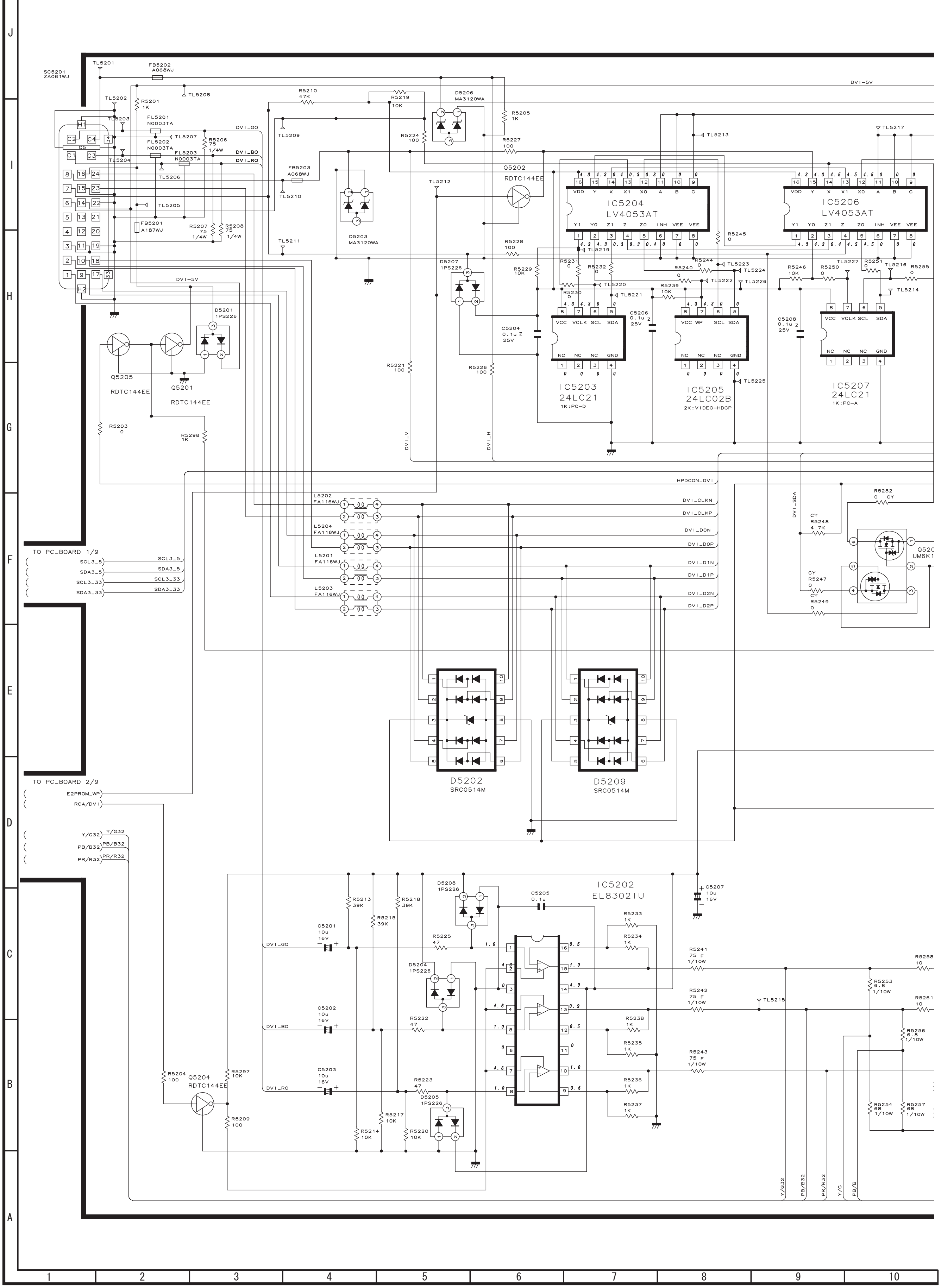

TO PC_BOARD 2/9
ASEBRKAK
ASEMDO
AUDSYNCN
UD_AUD0
UD_AUD1
UD_AUD2
UD_AUD3
UD_AUDCK
UD_TCK
UD_TDI
UD_TDO
UD_TMS
UD_TRST
D0 … D31
TO PC_BOARD 2/9
-WEH
-WEL
FWP232C
CASL
RAS
-RESET
FLWP
-WR/RD
-RD
-CSOFL
-CS3
CKIO
SH3_CKE
DQMUL
DQMUU
A0 … A25
TP5012
TL5009
TP5024
TL5012
TP5026
TP5013
TP5027
TL5015
CKIO
C5020 0.1u 25V
C5022 0.1u CYB
R5031 10
C5023 15P
R5043 10K
R5022 100
X5001 SCA062WJ 16.588MHz
C5032 15P
R5032 150
C5024 1u 10V
C5025 1u 10V
C5026 470P
R5038 10K
C5027 470P
C5028 1u 10V
R5011 0
R5042 0
R5014 0
R5034 0
HDMI_INT
FWP232C
C5029 1u 10V
R5048 1K
R5052 10K
R5051 10K
R5049 1K
R5057 0
R5058 0
R5050 0
R5056 10K
R5053 1K
R5054 10K
SCL3_5
SDA3_33
SCL3_33
SDA3_5
SDA30
SCL30
SDA2_33
SDA20
SCL2_33
SCL2_5
SDA2_5
IC5005 HN1K03FU
IC5004 ALC125PW
IC5006 HN1K03FU
SH3/SUB
SH3_RXD0
SH3_TXD0
SH3_SCK0
SH3_TXD2
SH3_RXD2
RGBVIDEO
SHREQ
SH3_TXD1
SH3_RXD1
TO PC_BOARD 3/13 DVI
TO PC_BOARD 4/13 HDMI
HDMI_INT
HDMI_HPG2
HDMI_SW_OE
HDMI_HPG3
HDMI_SEL1
HDMI_SEL2
HDMI_SEL3
HDMI_SW_EMP
422/444
9011_EN/HIZ
HDMI_PLG_EN
SIRCON
TO PC_BOARD 5/13 SYNC
SELA
SELB
SELPCH
SEL_GSYNC
TO PC_BOARD 6/13 AD
TO PC_BOARD 7/13 VIDEO
TO PC_BOARD 10/13 PW390
-RESETC1
TO PC_BOARD 11/13
TO PC_BOARD 12/13
B+5VD
B+3.3VD
B+1.8VD_SH3
FB5001 A187WJ
FB5002 A187WJ
C5005 10u 10V KZA176WJ
TO PC_BOARD 13/13
SCL41
SDA41
SCL40
SDA40
TP5007
TP5008
R5044 10K
R5023 0
R5004 0
R5005 10K
C5030 0.1u 25V
TL5023
TL5024
TL5025
R5024 0
R5036 10K
R5041 10K
C5021 0.1u 25V
C5019 0.1u 25V
R5029 0
R5027 10
TP5022
TP5003
TP5004
TP5005
TP5029
TP5031
R5030 10K
TL5014
TL5022
TL5013
R5006 0
TL5019
TL5020
TL5021
-RD
-WEL
-WEH
DQMUL
DQMUU
-WR/RD
-CSOFL
-CS3
-CS4
-RST_PLL
-WAIT_C1
SH3_CKE
11
12
13
14
15
16
17
18
19

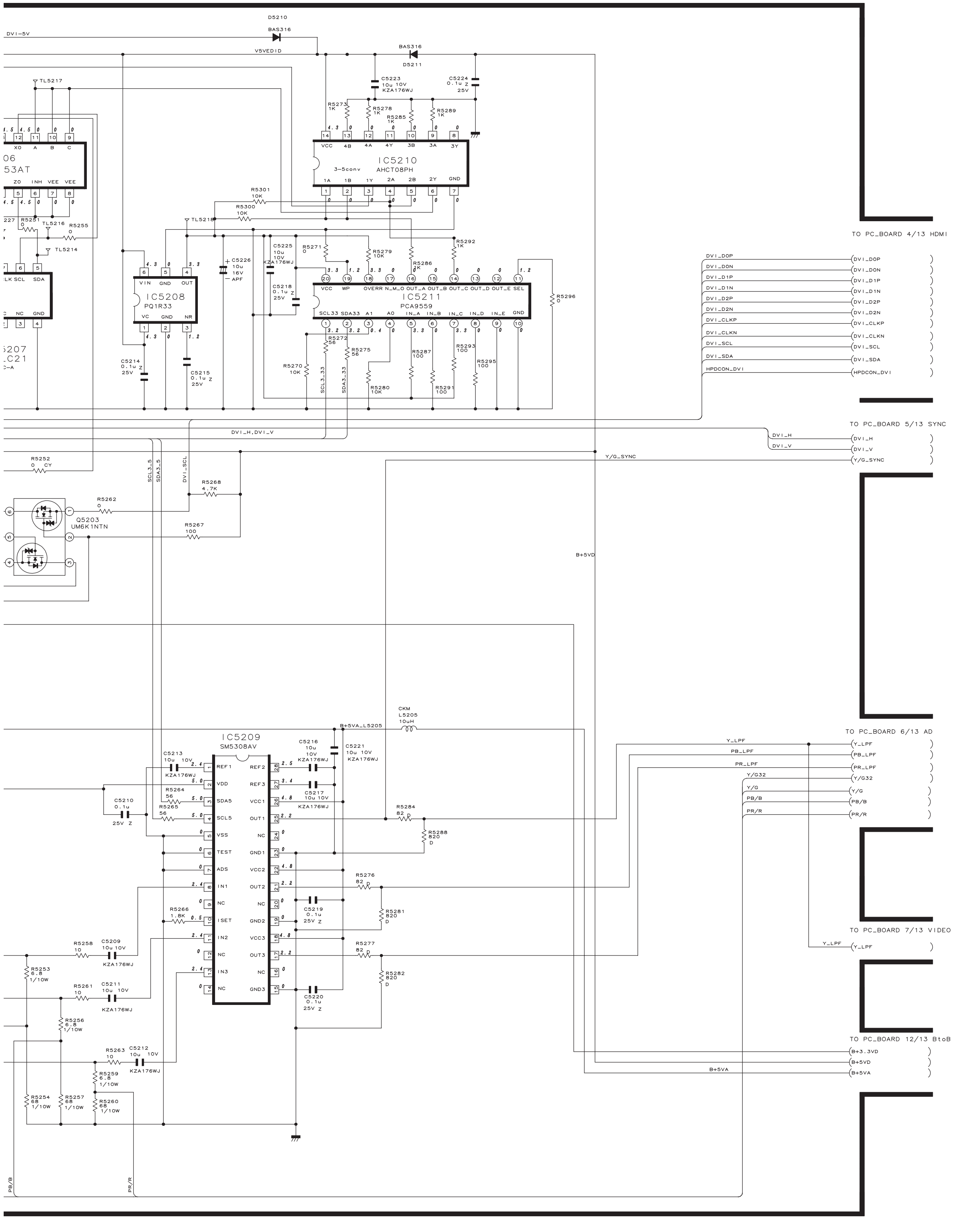
■PC I/F Unit-2


TO PC_BOARD 1/13
-WEH
-WEL
-CS3
CKIO
SH3_CKE
DQMUL
DQMUU
CASL
RAS
-RESET
-CSOFL
-WR/RD
-RD
FWP232C
FLWP
A0 … A25
D0 … D31
SH3/SUB
ASEBRKAK
ASEMDO
AUDSYNCN
UD_AUD0
UD_AUD1
UD_AUD2
UD_AUD3
UD_AUDCK
UD_TCK
UD_TDI
UD_TDO
UD_TMS
UD_TRST
SH3_TXD1
SH3_RXD1
SH3_SCK0
SH3_TXD0
SH3_RXD0
RGBVIDEO
SHREQ
SCL2_5
SDA2_5
IXB787WJN1
IC5101
LH28F640
A16 VCCQ GND DQ15 DQ7 DQ14 DQ6 DQ13 DQ5 DQ12 DQ4 VCC DQ11 DQ3 DQ10 DQ2 DQ9 DQ1 DQ8 DQ0 OE GND CE A0
A15 A14 A13 A12 A11 A10 A9 A8 A21 A20 WE RST VPP WP A19 A18 A17 A7 A6 A5 A4 A3 A2 A1
R5102 0
R5111 0
R5118 0
R5122 0
R5129 0
R5126 0
R5127 0
R5130 0
C5103 0.01u
C5104 0.01u
B+3.3VD_R5130
TL5101
TL5102
TL5108
TL5113
R5134 10K
WRITE
NORMAL
S5101 SA020WJ
R5137 0
B+3.3VD
C5101 0.1u 25V Z
C5102 0.1u 25V Z
R5116 0
R5121 0
SC5101 W6013CEN1
60 B(Aneleg) — B(Aneleg) 30
59 GND — GND 29
58 G(Aneleg) — G(Aneleg) 28
57 GND — GND 27
56 R(Aneleg) — R(Aneleg) 26
55 GND — GND 25
54 GND — GND 24
53 — 23
52 GND — GND 22
51 — 21
50 GND — GND 20
49 — 19
48 GND — GND 18
47 RCA1_H — RCA1_V 17
46 RCA2_H — RCA2_V 16
45 GND — GND 15
44 — 14
43 GND — GND 13
42 COMP1/2 — 12
41 — 11
40 TXD — RXD 10
39 TXD0 — RXD0 9
38 SCK0 — SHREQ 8
37 — EXT/INT 7
36 PW/SH3 — RCA/DVI 6
35 GND — GND 5
34 YSL — CSL 4
33 GND — GND 3
32 CYBS — 2
31 GND — GND 1
PR/R32
Y/G32
PB/B32
TL5115
TL5116
TL5107
TL5106
TL5103
TL5104
TL5105
TL5111
TL5112
TL5117
RCA1_H
RCA2_H
RCA1_V
RCA2_V
RGBVIDEO
SH3_TXD0
R5124 56
R5133 56
SH3_SCK0
SHREQ
SH3_RXD0
YSL
CVBS
CSL
R5135 0
R5138 0
R5139 10
R5148 10
CS0 CS1 CS2
SO SCL SDA
IC
M62
SCL2_5
SDA2_5
J
I
H
G
F
E
D
C
B
A
1 2 3 4 5 6 7 8 9 10


IC5104
IXB202WJ
IC5103
M62320FP
C5105 0.01u
C5106 0.01u
C5107 0.01u
C5108 0.01u
C5109 0.01u
C5110 0.01u
C5111 0.01u
C5112 0.01u
C5113 0.01u
C5114 0.01u
R5137 0
R5144 10
R5145 10
R5146 10
R5164 10
R5165 10
R5166 10
R5167 10 CY
R5168 10 CY
R5136 6.8K
R5140 0
R5132 0
R5142 22K
R5141 6.8K
R5173 6.8K
R5170 0
R5171 0
R5172 10K
ASEMDO
UD_AUD0
UD_AUD1
UD_AUD2
UD_AUD3
AUDSYNCN
UD_TCK
UD_TMS
UD_TRST
UD_TDI
UD_TDO
ASEBRKAK
-RESET
UD_AUDCK
B+3.3VD
B+5VD
BINARY
TO PC_BOARD 3/13 DVI
PB/B32
PR/R32
Y/G32
E2PROM_WP
RCA/DVI
TO PC_BOARD 4/13 HDMI
E2PROM_WP
TO PC_BOARD 5/13 SYNC
RCA1_H
RCA1_V
RCA2_H
RCA2_V
RCA/DVI
SOGSEL
YG/HD
TO PC_BOARD 7/13 VIDEO
CVBS
YSL
CSL
TO PC_BOARD 10/13 PW39
PW_RXD
PW_TXD
TO PC_BOARD 12/13
B+3.3VD
B+5VD
BINARY
R5135 0
R5138 0
R5147 0
R5151 10
R5157 1K
R5160 1K
R5161 1K
R5159 1.5K
R5162 1.5K
R5163 1.5K
R5139 10
R5148 10
R5149 10
R5154 10
R5156 10
R5150 10K
R5153 10K
R5155 10K
R5158 10K
TL5122
TL5109
TL5110
TL5118
RCA/DVI
SOGSEL
E2PROM_WP
YG/HD
SCL2.5
SDA2.5
CSL
11
12
13
14
15
16
17
18
19

■PC I/F Unit-3


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
SC5201
ZA061WJ
TL5201
FB5202
A068WJ
TL5208
TL5202
R5201
1K
TL5203
FL5201
N0003TA
TL5207
FL5202
N0003TA
R5206
75
1/4W
TL5204
FL5203
N0003TA
DVI_GO
DVI_BO
DVI_RO
TL5206
TL5205
FB5201
A187WJ
R5207
75
1/4W
R5208
75
1/4W
DVI-5V
R5210
47K
R5219
10K
D5206
MA3120WA
R5205
1K
TL5209
R5224
100
R5227
100
FB5203
A068WJ
TL5210
Q5202
RDTC144EE
TL5212
TL5211
D5203
MA3120WA
R5228
100
D5207
1PS226
R5229
10K
D5201
1PS226
Q5205
RDTC144EE
Q5201
RDTC144EE
R5203
0
R5298
1K
R5221
100
R5226
100
DVI_V
DVI_H
TL5213
IC5204
LV4053AT
VDD
Y
X
X1
X0
A
B
C
Y1
Y0
Z1
Z
Z0
INH
VEE
TL5219
R5245
0
R5231
0
R5232
0
R5230
0
TL5220
TL5221
R5244
0
R5240
0
TL5223
TL5224
R5239
10K
TL5222
TL5226
C5206
0.1u Z
25V
C5204
0.1u Z
25V
IC5203
24LC21
1K:PC-D
VCC
VCLK
SCL
SDA
NC
GND
WP
IC5205
24LC02B
2K:VIDEO-HDCP
TL5225
TL5217
IC5206
LV4053AT
R5246
10K
R5250
0
TL5227
R5251
0
TL5216
R5255
0
TL5214
C5208
0.1u Z
25V
IC5207
24LC21
1K:PC-A
DVI-5V
HPDCON_DVI
DVI_SDA
R5252
0 CY
CY
R5248
4.7K
CY
R5247
0
CY
R5249
0
Q520
UM6K1
L5202
FA116WJ
L5204
FA116WJ
L5201
FA116WJ
L5203
FA116WJ
DVI_CLKN
DVI_CLKP
DVI_D0N
DVI_D0P
DVI_D1N
DVI_D1P
DVI_D2N
DVI_D2P
TO PC_BOARD 1/9
SCL3_5
SDA3_5
SCL3_33
SDA3_33
D5202
SRC0514M
D5209
SRC0514M
TO PC_BOARD 2/9
E2PROM_WP
RCA/DVI
Y/G32
PB/B32
PR/R32
D5208
1PS226
C5205
0.1u
IC5202
EL8302IU
C5207
10u
16V
R5213
39K
R5218
39K
R5215
39K
C5201
10u
16V
R5225
47
R5233
1K
R5234
1K
D5204
1PS226
R5241
75 F
1/10W
R5242
75 F
1/10W
R5243
75 F
1/10W
R5258
10
R5253
6.8
1/10W
R5261
10
TL5215
C5202
10u
16V
R5222
47
R5238
1K
R5235
1K
R5256
6.8
1/10W
C5203
10u
16V
R5223
47
D5205
1PS226
R5236
1K
R5237
1K
R5204
100
Q5204
RDTC144EE
R5297
10K
R5209
100
R5217
10K
R5214
10K
R5220
10K
R5254
68
1/10W
R5257
68
1/10W
Y/G32
PB/B32
PR/R32
Y/G
PB/B


DVI-5V
D5210
BAS316
V5VEDID
BAS316
D5211
C5223 10u 10V KZA176WJ
C5224 0.1u Z 25V
TL5217
R5273 1K
R5278 1K
R5285 1K
R5289 1K
IC5210
3-5conv
AHCT08PH
R5301 10K
R5300 10K
TL5218
TL5216
TL5214
R5251 0
R5255 0
C5225 10u 10V KZA176WJ
C5226 10u 16V APF
C5218 0.1u Z 25V
R5271 0
R5279 10K
R5286 1K
R5292 1K
IC5208
PQ1R33
IC5211
PCA9559
R5296 0
C5214 0.1u Z 25V
C5215 0.1u Z 25V
R5272 56
R5275 56
R5270 10K
R5287 100
R5293 100
R5295 100
R5280 10K
R5291 100
SCL3_33
SDA3_33
TO PC_BOARD 4/13 HDMI
DVI_D0P
DVI_D0N
DVI_D1P
DVI_D1N
DVI_D2P
DVI_D2N
DVI_CLKP
DVI_CLKN
DVI_SCL
DVI_SDA
HPDCON_DVI
DVI_H,DVI_V
TO PC_BOARD 5/13 SYNC
DVI_H
DVI_V
Y/G_SYNC
R5252 0 CY
SCL3_5
SDA3_5
DVI_SCL
R5268 4.7K
R5262 0
Q5203 UM6K1NTN
R5267 100
B+5VD
CKM L5205 10uH
B+5VA_L5205
IC5209
SM5308AV
C5216 10u 10V KZA176WJ
C5221 10u 10V KZA176WJ
C5213 10u 10V KZA176WJ
R5264 56
R5265 56
C5210 0.1u 25V Z
C5217 10u 10V KZA176WJ
R5284 82 D
R5288 820 D
TO PC_BOARD 6/13 AD
Y_LPF
PB_LPF
PR_LPF
Y/G32
Y/G
PB/B
PR/R
R5276 82 D
R5281 820 D
C5219 0.1u 25V Z
R5266 1.8K
R5277 82 D
R5282 820 D
TO PC_BOARD 7/13 VIDEO
Y_LPF
R5258 10
C5209 10u 10V KZA176WJ
R5253 6.8 1/10W
R5261 10
C5211 10u 10V KZA176WJ
C5220 0.1u 25V Z
R5256 6.8 1/10W
R5263 10
C5212 10u 10V KZA176WJ
R5259 6.8 1/10W
TO PC_BOARD 12/13 BtoB
B+3.3VD
B+5VD
B+5VA
R5254 68 1/10W
R5257 68 1/10W
R5260 68 1/10W
PB/B
PR/R
11
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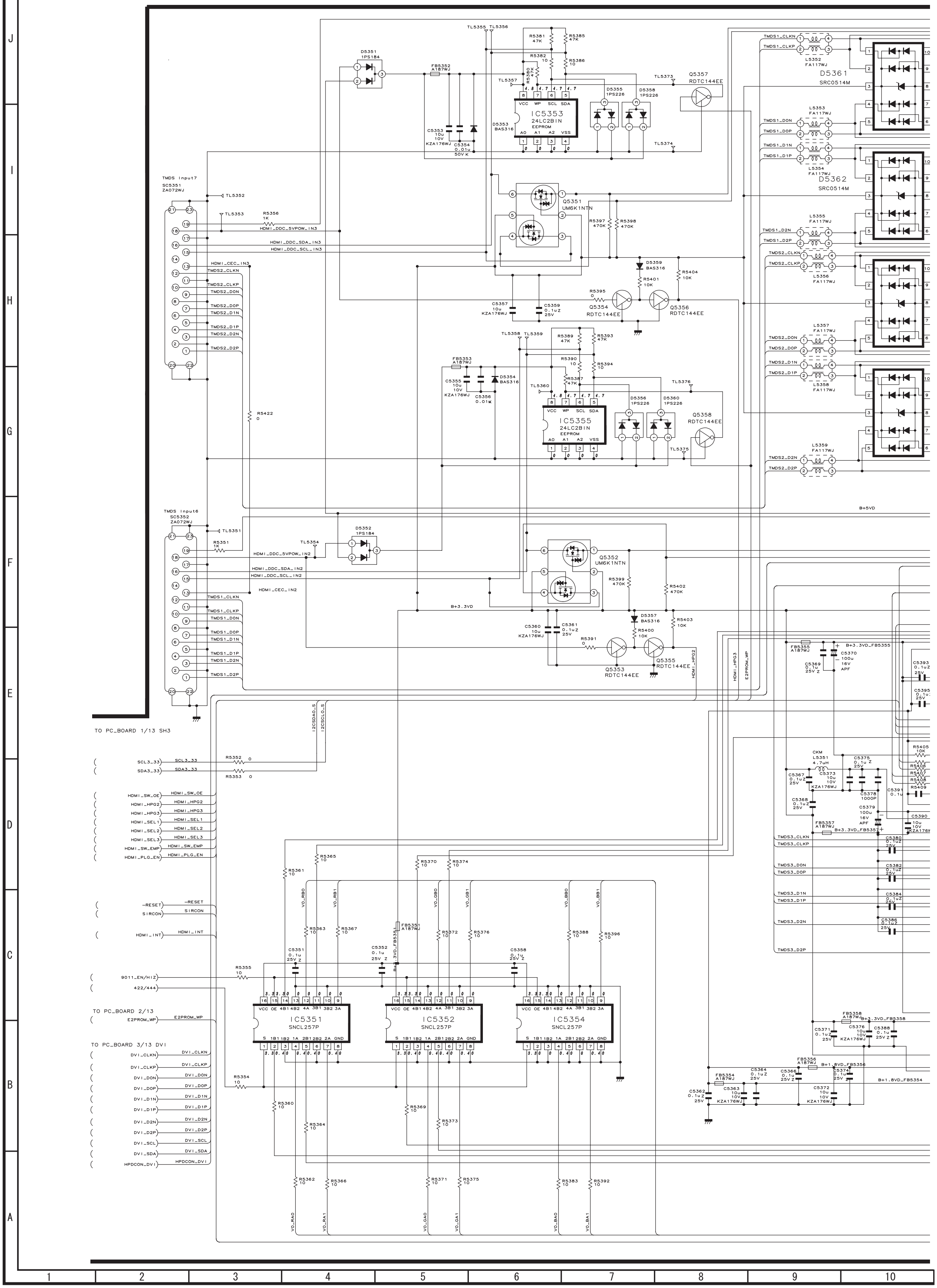
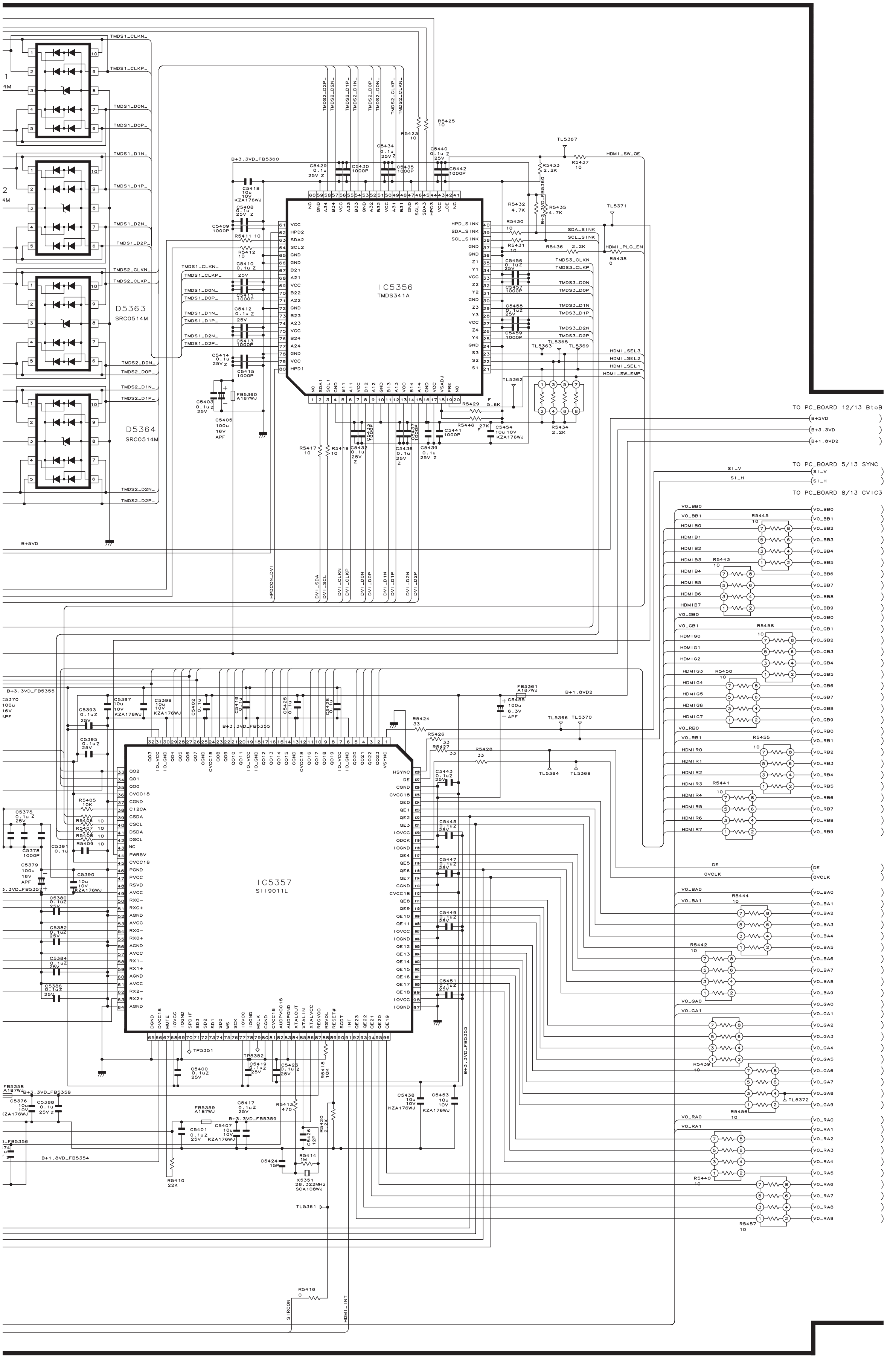
■PC I/F Unit-4


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TMDS Input7
SC5351
ZA072WJ
TMDS Input6
SC5352
ZA072WJ
D5351
1PS184
D5352
1PS184
FB5352
A187WJ
FB5353
A187WJ
IC5353
24LC28IN
EEPROM
IC5355
24LC28IN
EEPROM
Q5351
UM6K1NTN
Q5352
UM6K1NTN
Q5353
RDTC144EE
Q5354
RDTC144EE
Q5355
RDTC144EE
Q5356
RDTC144EE
Q5357
RDTC144EE
Q5358
RDTC144EE
D5353
BAS316
D5354
BAS316
D5355
1PS226
D5356
1PS226
D5357
BAS316
D5358
1PS226
D5359
BAS316
D5360
1PS226
D5361
SRC0514M
D5362
SRC0514M
L5351
L5352
FA117WJ
L5353
FA117WJ
L5354
FA117WJ
L5355
FA117WJ
L5356
FA117WJ
L5357
FA117WJ
L5358
FA117WJ
L5359
FA117WJ
HDMI_DDC_5VPOW_IN3
HDMI_DDC_SDA_IN3
HDMI_DDC_SCL_IN3
HDMI_CEC_IN3
HDMI_DDC_5VPOW_IN2
HDMI_DDC_SDA_IN2
HDMI_DDC_SCL_IN2
HDMI_CEC_IN2
TMDS1_CLKN
TMDS1_CLKP
TMDS1_D0N
TMDS1_D0P
TMDS1_D1N
TMDS1_D1P
TMDS1_D2N
TMDS1_D2P
TMDS2_CLKN
TMDS2_CLKP
TMDS2_D0N
TMDS2_D0P
TMDS2_D1N
TMDS2_D1P
TMDS2_D2N
TMDS2_D2P
TMDS3_CLKN
TMDS3_CLKP
TMDS3_D0N
TMDS3_D0P
TMDS3_D1N
TMDS3_D1P
TMDS3_D2N
TMDS3_D2P
B+5VD
B+3.3VD
B+3.3VD_FB5355
B+3.3VD_FB5357
B+3.3VD_FB5358
B+1.8VD_FB5356
B+1.8VD_FB5354
HDMI_HPG2
HDMI_HPG3
E2PROM_WP
I2CSDA0_S
I2CSCL0_S
TO PC_BOARD 1/13 SH3
SCL3_33
SDA3_33
HDMI_SW_OE
HDMI_HPG2
HDMI_HPG3
HDMI_SEL1
HDMI_SEL2
HDMI_SEL3
HDMI_SW_EMP
HDMI_PLG_EN
~RESET
SIRCON
HDMI_INT
9011_EN/HIZ
422/444
TO PC_BOARD 2/13
E2PROM_WP
TO PC_BOARD 3/13 DVI
DVI_CLKN
DVI_CLKP
DVI_D0N
DVI_D0P
DVI_D1N
DVI_D1P
DVI_D2N
DVI_D2P
DVI_SCL
DVI_SDA
HPDCON_DVI
IC5351
SNCL257P
IC5352
SNCL257P
IC5354
SNCL257P
VO_RB0
VO_RB1
VO_GB0
VO_GB1
VO_BB0
VO_BB1
VO_RA0
VO_RA1
VO_GA0
VO_GA1
VO_BA0
VO_BA1
CKM
L5351
4.7uH


D5363
SRC0514M
D5364
SRC0514M
IC5356
TMDS341A
IC5357
SII9011L
TMDS1_CLKN_
TMDS1_CLKP_
TMDS1_D0N_
TMDS1_D0P_
TMDS1_D1N_
TMDS1_D1P_
TMDS1_D2N_
TMDS1_D2P_
TMDS2_CLKN_
TMDS2_CLKP_
TMDS2_D0N_
TMDS2_D0P_
TMDS2_D1N_
TMDS2_D1P_
TMDS2_D2N_
TMDS2_D2P_
TMDS3_CLKN
TMDS3_CLKP
TMDS3_D0N
TMDS3_D0P
TMDS3_D1N
TMDS3_D1P
TMDS3_D2N
TMDS3_D2P
B+3.3VD_FB5360
B+3.3VD_FB5355
B+3.3VD_FB5358
B+3.3VD_FB5359
B+1.8VD_FB5354
B+1.8VD2
B+5VD
HDMI_SW_OE
HDMI_PLG_EN
HDMI_SEL3
HDMI_SEL2
HDMI_SEL1
HDMI_SW_EMP
SDA_SINK
SCL_SINK
HPDCON_DVI
DVI_SDA
DVI_SCL
DVI_CLKN
DVI_CLKP
DVI_D0N
DVI_D0P
DVI_D1N
DVI_D1P
DVI_D2N
DVI_D2P
TO PC_BOARD 12/13 BtoB
B+5VD
B+3.3VD
B+1.8VD2
TO PC_BOARD 5/13 SYNC
SI_V
SI_H
TO PC_BOARD 8/13 CVIC3
V0_BB0
V0_BB1
V0_BB2
V0_BB3
V0_BB4
V0_BB5
V0_BB6
V0_BB7
V0_BB8
V0_BB9
V0_GB0
V0_GB1
V0_GB2
V0_GB3
V0_GB4
V0_GB5
V0_GB6
V0_GB7
V0_GB8
V0_GB9
V0_RB0
V0_RB1
V0_RB2
V0_RB3
V0_RB4
V0_RB5
V0_RB6
V0_RB7
V0_RB8
V0_RB9
DE
OVCLK
V0_BA0
V0_BA1
V0_BA2
V0_BA3
V0_BA4
V0_BA5
V0_BA6
V0_BA7
V0_BA8
V0_BA9
V0_GA0
V0_GA1
V0_GA2
V0_GA3
V0_GA4
V0_GA5
V0_GA6
V0_GA7
V0_GA8
V0_GA9
V0_RA0
V0_RA1
V0_RA2
V0_RA3
V0_RA4
V0_RA5
V0_RA6
V0_RA7
V0_RA8
V0_RA9
HDMIB0
HDMIB1
HDMIB2
HDMIB3
HDMIB4
HDMIB5
HDMIB6
HDMIB7
HDMIG0
HDMIG1
HDMIG2
HDMIG3
HDMIG4
HDMIG5
HDMIG6
HDMIG7
HDMIR0
HDMIR1
HDMIR2
HDMIR3
HDMIR4
HDMIR5
HDMIR6
HDMIR7
R5445
R5443
R5458
R5450
R5455
R5441
R5444
R5442
R5439
R5456
R5440
R5457
R5423
R5425
R5433 2.2K
R5437 10
R5432 4.7K
R5435 4.7K
R5430 10
R5431 10
R5436 2.2K
R5438 0
R5434 2.2K
R5429 5.6K
R5446 27K
R5417 10
R5419 10
R5424 33
R5426 33
R5427 33
R5428 33
R5405 10K
R5406 10
R5407 10
R5408 10
R5409 10
R5410 22K
R5413 470
R5414
R5416 0
R5418 10K
R5420 2.2K
R5411 10
R5412 10
TL5367
TL5371
TL5362
TL5363
TL5365
TL5369
TL5364
TL5366
TL5368
TL5370
TL5361
TL5372
TP5351
TP5352
FB5360 A187WJ
FB5361 A187WJ
FB5359 A187WJ
FB5358 A187WJ
X5351 28.322MHz SCA108WJ
SIRCON
HDMI_INT
11
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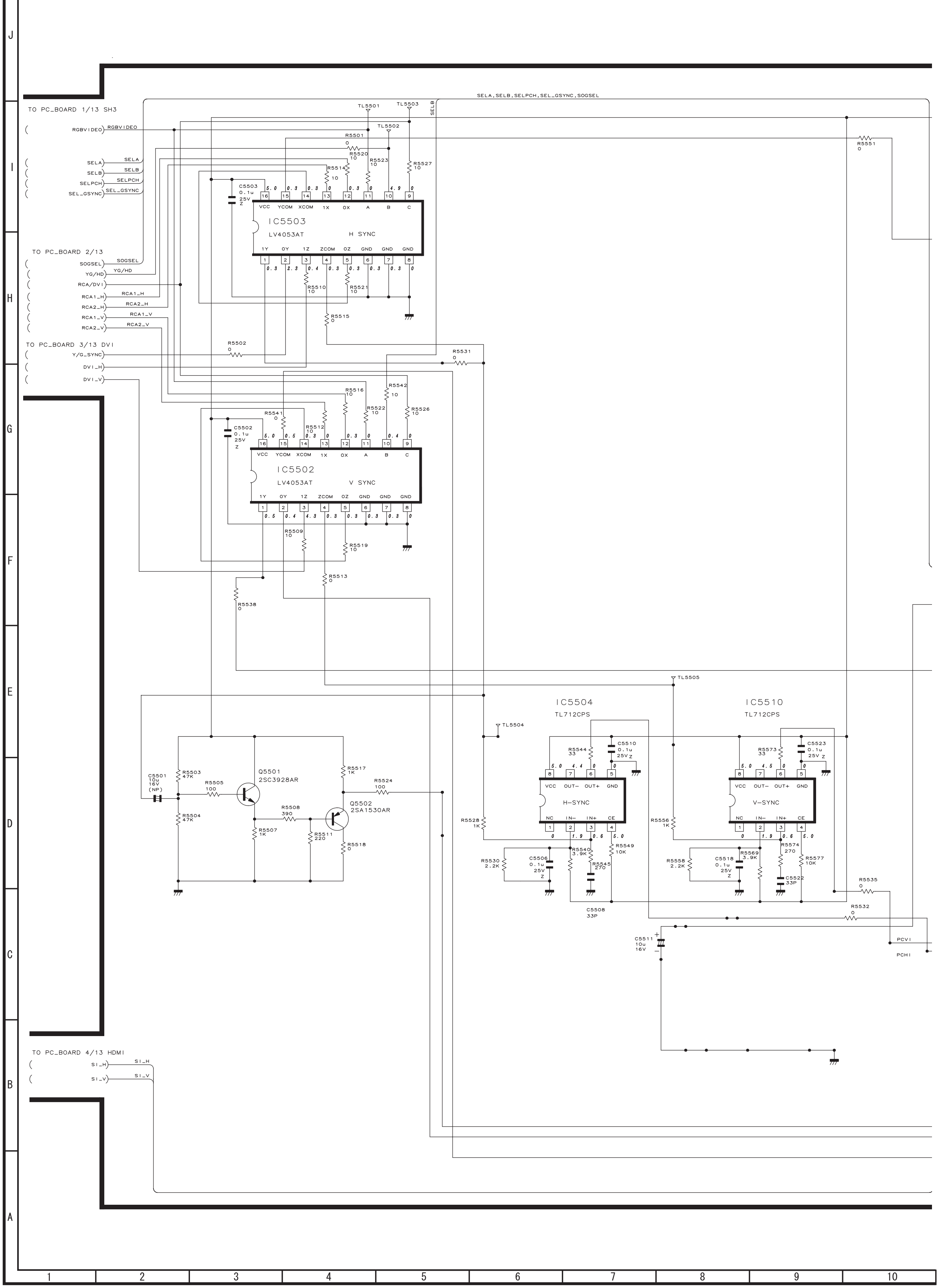
■PC I/F Unit-5


TO PC_BOARD 1/13 SH3
RGBVIDEO
SELA
SELB
SELPCH
SEL_GSYNC
TO PC_BOARD 2/13
SOGSEL
YG/HD
RCA/DVI
RCA1_H
RCA2_H
RCA1_V
RCA2_V
TO PC_BOARD 3/13 DVI
Y/G_SYNC
DVI_H
DVI_V
TO PC_BOARD 4/13 HDMI
SI_H
SI_V
SELA,SELB,SELPCH,SEL_GSYNC,SOGSEL
TL5501
TL5502
TL5503
TL5504
TL5505
IC5503
LV4053AT
H SYNC
IC5502
LV4053AT
V SYNC
VCC
YCOM
XCOM
1X
0X
A
B
C
1Y
0Y
1Z
ZCOM
0Z
GND
IC5504
TL712CPS
H-SYNC
IC5510
TL712CPS
V-SYNC
OUT-
OUT+
NC
IN-
IN+
CE
Q5501
2SC3928AR
Q5502
2SA1530AR
C5501 10u 16V (NP)
C5502 0.1u 25V Z
C5503 0.1u 25V Z
C5506 0.1u 25V Z
C5508 33P
C5510 0.1u 25V Z
C5511 10u 16V
C5518 0.1u 25V Z
C5522 33P
C5523 0.1u 25V Z
R5501 0
R5502 0
R5503 47K
R5504 47K
R5505 100
R5507 1K
R5508 390
R5509 10
R5510 10
R5511 220
R5512 10
R5513 0
R5514 10
R5515 0
R5516 10
R5517 1K
R5518 0
R5519 10
R5520 10
R5521 10
R5522 10
R5523 10
R5524 100
R5526 10
R5527 10
R5528 1K
R5530 2.2K
R5531 0
R5532 0
R5535 0
R5538 0
R5540 3.9K
R5541 0
R5542 10
R5544 33
R5545 270
R5549 10K
R5551 0
R5556 1K
R5558 2.2K
R5569 3.9K
R5573 33
R5574 270
R5577 10K
PCVI
PCHI
J
I
H
G
F
E
D
C
B
A
1
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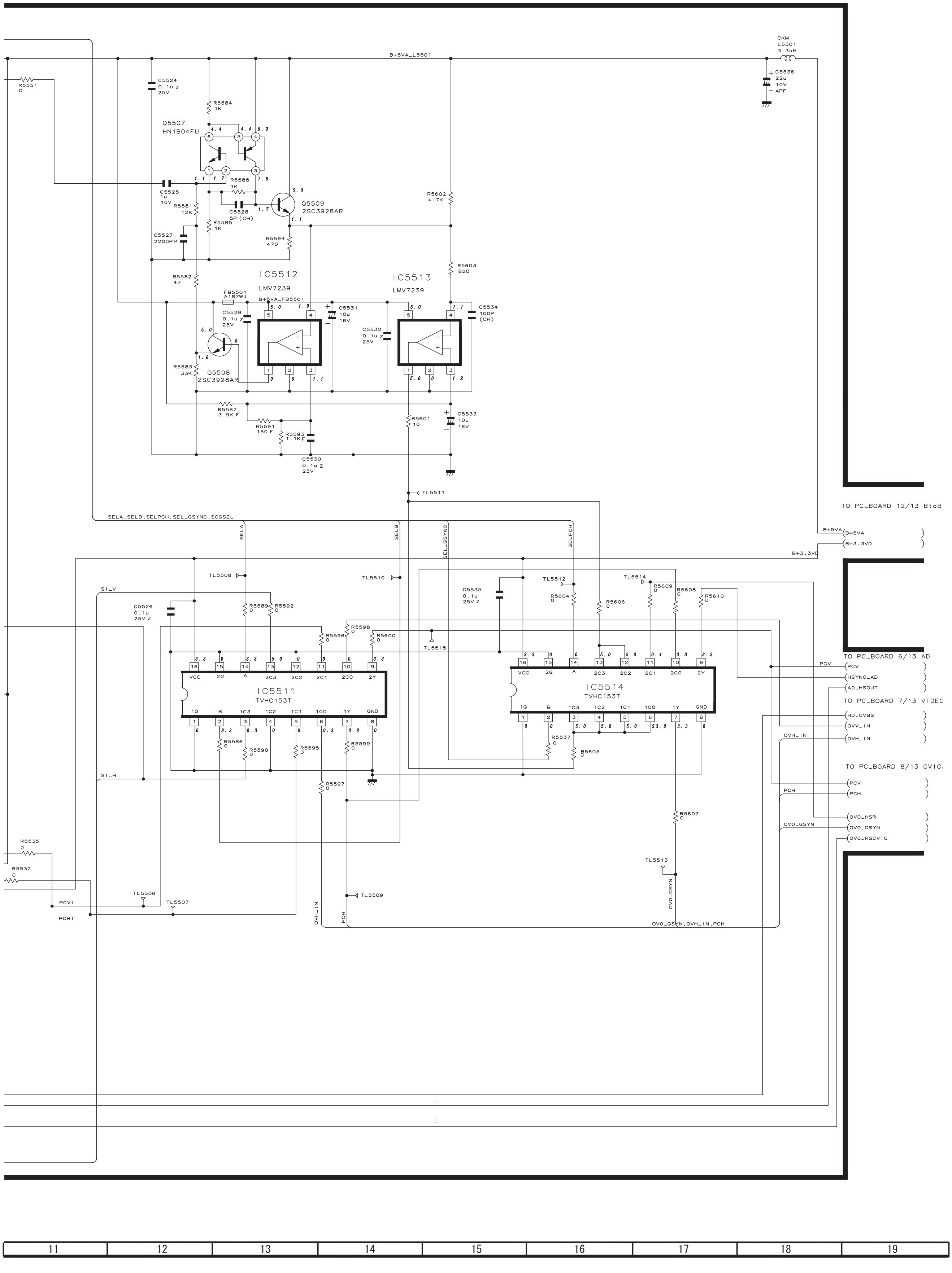
B+5VA_L5501
CKM
L5501
3.3uH
C5536
22u
10V
APF
R5551
0
C5524
0.1u Z
25V
R5584
1K
Q5507
HN1B04FU
R5588
1K
C5525
1u
10V
R5581
12K
C5528
5P (CH)
R5585
1K
Q5509
2SC3928AR
C5527
2200P K
R5594
470
R5602
4.7K
R5603
820
IC5512
LMV7239
IC5513
LMV7239
R5582
47
FB5501
A187WJ
B+5VA_FB5501
C5529
0.1u Z
25V
C5531
10u
16V
C5532
0.1u Z
25V
C5534
100P
(CH)
R5583
33K
Q5508
2SC3928AR
R5587
3.9K F
R5591
150 F
R5593
1.1K F
C5530
0.1u Z
25V
R5601
10
C5533
10u
16V
TL5511
SELA,SELB,SELPCH,SEL_GSYNC,SOGSEL
SELA
SELB
SEL_GSYNC
SELPCH
TO PC_BOARD 12/13 BtoB
B+5VA
B+3.3VD
TL5508
TL5510
TL5512
TL5514
C5535
0.1u
25V Z
R5604
0
R5606
0
R5609
0
R5608
0
R5610
0
SI_V
C5526
0.1u
25V Z
R5589
0
R5592
0
R5596
0
R5598
0
R5600
0
TL5515
IC5511
TVHC153T
IC5514
TVHC153T
VCC
2G
A
2C3
2C2
2C1
2C0
2Y
1G
B
1C3
1C2
1C1
1C0
1Y
GND
TO PC_BOARD 6/13 AD
PCV
HSYNC_AD
AD_HSOUT
TO PC_BOARD 7/13 VIDEO
HD_CVBS
OVV_IN
OVH_IN
R5586
0
R5590
0
R5595
0
R5599
0
R5537
0
R5605
0
SI_H
R5597
0
TO PC_BOARD 8/13 CVIC
PCV
PCH
R5607
0
OVO_HSR
OVO_GSYN
OVO_HSCVIC
R5535
0
R5532
0
TL5513
TL5506
TL5507
TL5509
PCVI
PCHI
OVH_IN
PCH
OVO_GSYN
OVO_GSYN,OVH_IN,PCH
11
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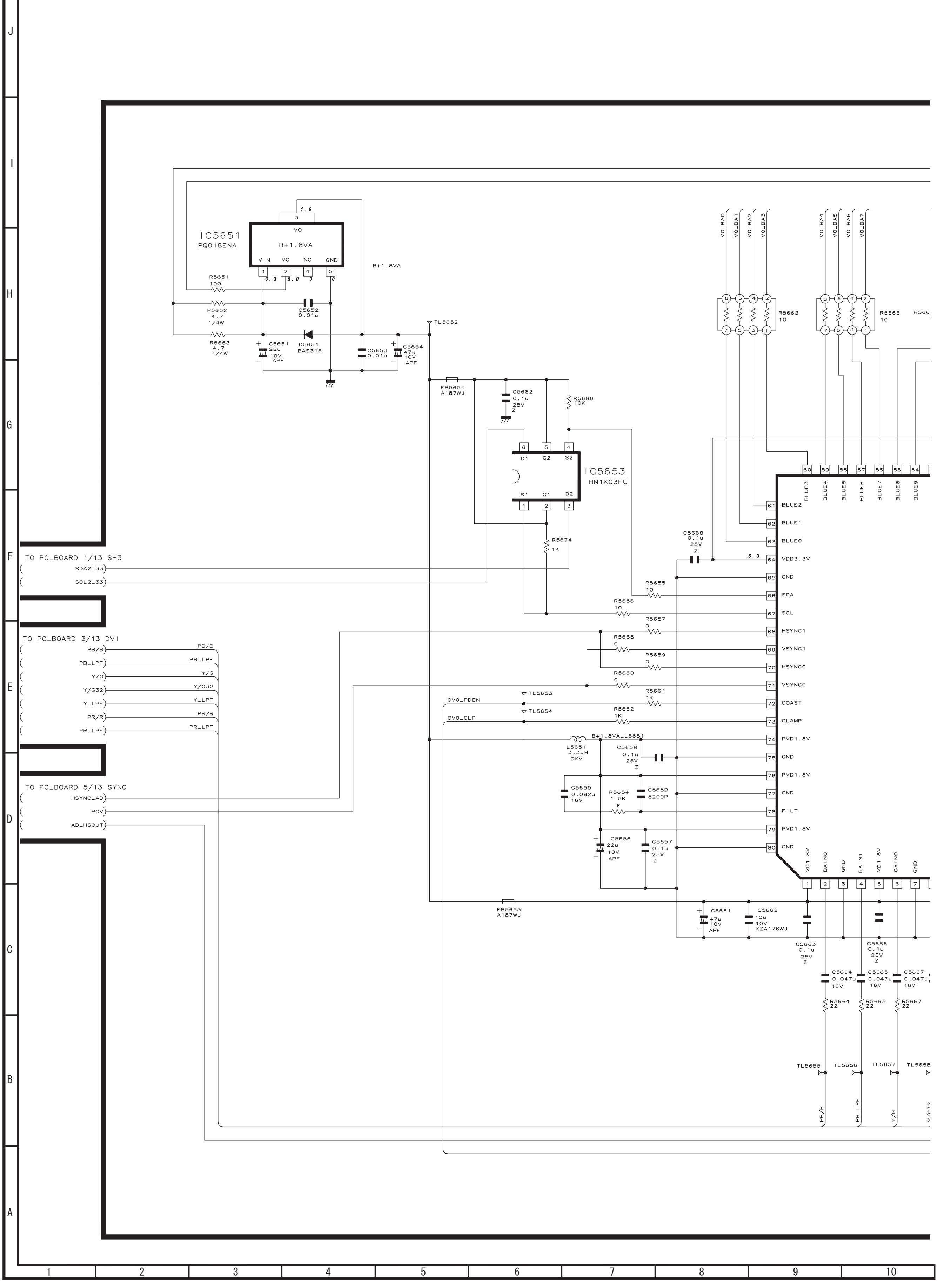
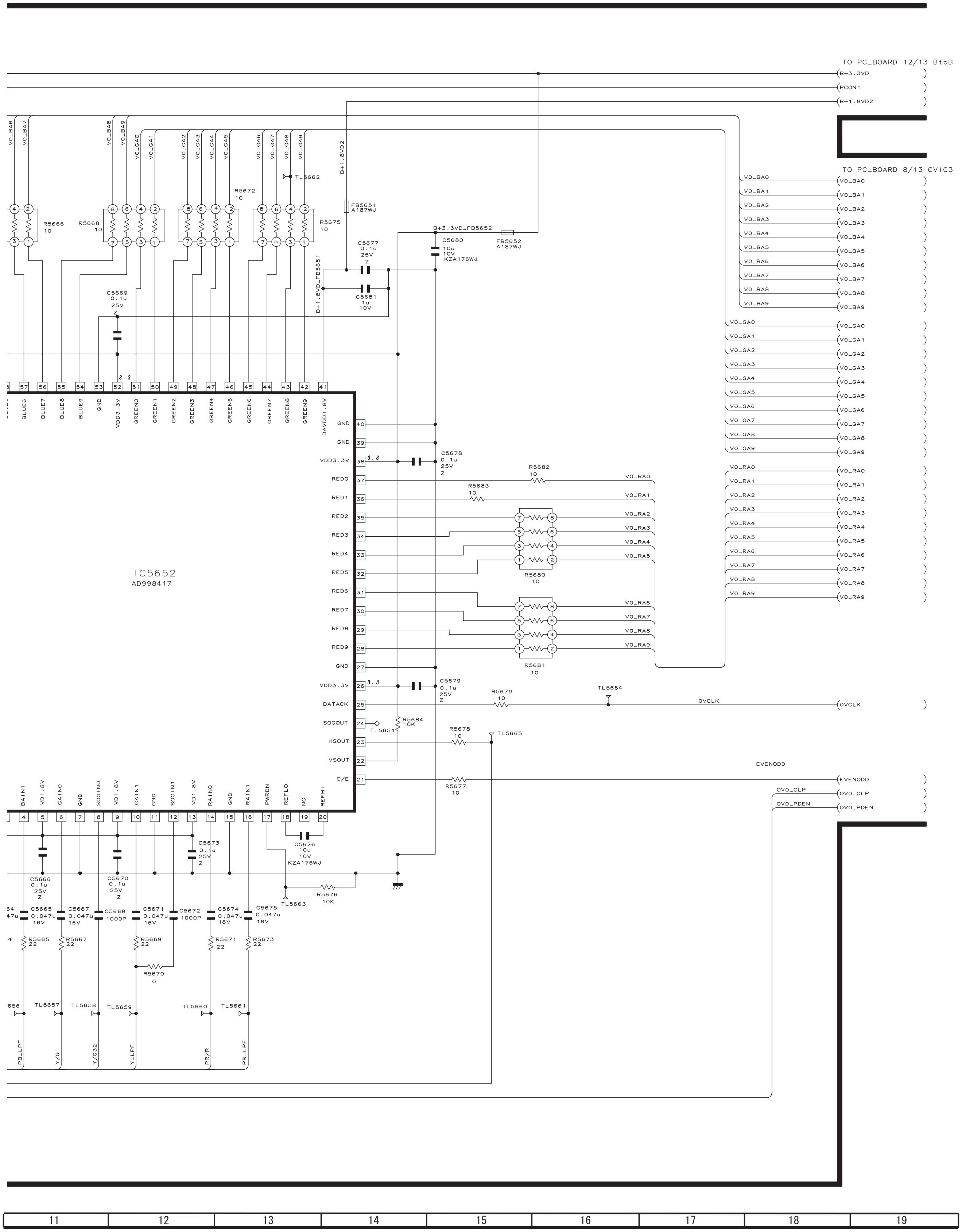
■PC I/F Unit-6


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC5651
PQ018ENA
B+1.8VA
VO
VIN
VC
NC
GND
1.8
3.3
5.0
0
0
B+1.8VA
R5651
100
R5652
4.7
1/4W
C5652
0.01u
R5653
4.7
1/4W
C5651
22u
10V
APF
D5651
BAS316
C5653
0.01u
C5654
47u
10V
APF
TL5652
FB5654
A187WJ
C5682
0.1u
25V
Z
R5686
10K
IC5653
HN1K03FU
D1
G2
S2
S1
G1
D2
R5674
1K
TO PC_BOARD 1/13 SH3
SDA2_33
SCL2_33
TO PC_BOARD 3/13 DVI
PB/B
PB_LPF
Y/G
Y/G32
Y_LPF
PR/R
PR_LPF
TO PC_BOARD 5/13 SYNC
HSYNC_AD
PCV
AD_HSOUT
VO_BA0
VO_BA1
VO_BA2
VO_BA3
VO_BA4
VO_BA5
VO_BA6
VO_BA7
R5663
10
R5666
10
C5660
0.1u
25V
Z
R5655
10
R5656
10
R5657
0
R5658
0
R5659
0
R5660
0
R5661
1K
R5662
1K
TL5653
TL5654
OVO_PDEN
OVO_CLP
B+1.8VA_L5651
L5651
3.3uH
CKM
C5658
0.1u
25V
Z
C5655
0.082u
16V
R5654
1.5K
F
C5659
8200P
C5656
22u
10V
APF
C5657
0.1u
25V
Z
FB5653
A187WJ
C5661
47u
10V
APF
C5662
10u
10V
KZA176WJ
C5663
0.1u
25V
Z
C5666
0.1u
25V
Z
C5664
0.047u
16V
C5665
0.047u
16V
C5667
0.047u
16V
R5664
22
R5665
22
R5667
22
TL5655
TL5656
TL5657
TL5658
BLUE2
BLUE1
BLUE0
VDD3.3V
GND
SDA
SCL
HSYNC1
VSYNC1
HSYNC0
VSYNC0
COAST
CLAMP
PVD1.8V
GND
PVD1.8V
GND
FILT
PVD1.8V
GND
BLUE3
BLUE4
BLUE5
BLUE6
BLUE7
BLUE8
BLUE9
VD1.8V
BAIN0
GND
BAIN1
VD1.8V
GAIN0
GND
PB/B
PB_LPF
Y/G


TO PC_BOARD 12/13 BtoB
B+3.3VD
PCON1
B+1.8VD2
TO PC_BOARD 8/13 CVIC3
V0_BA0
V0_BA1
V0_BA2
V0_BA3
V0_BA4
V0_BA5
V0_BA6
V0_BA7
V0_BA8
V0_BA9
V0_GA0
V0_GA1
V0_GA2
V0_GA3
V0_GA4
V0_GA5
V0_GA6
V0_GA7
V0_GA8
V0_GA9
V0_RA0
V0_RA1
V0_RA2
V0_RA3
V0_RA4
V0_RA5
V0_RA6
V0_RA7
V0_RA8
V0_RA9
OVCLK
EVENODD
OVO_CLP
OVO_PDEN
IC5652
AD998417
R5666 10
R5668 10
R5672 10
R5675 10
TL5662
FB5651 A187WJ
B+1.8VD_FB5651
B+3.3VD_FB5652
FB5652 A187WJ
C5677 0.1u 25V Z
C5680 10u 10V KZA176WJ
C5681 1u 10V
C5669 0.1u 25V Z
C5678 0.1u 25V Z
R5682 10
R5683 10
R5680 10
R5681 10
C5679 0.1u 25V Z
R5679 10
TL5664
R5684 10K
TL5651
R5678 10
TL5665
R5677 10
BLUE6
BLUE7
BLUE8
BLUE9
GND
VDD3.3V
GREEN0
GREEN1
GREEN2
GREEN3
GREEN4
GREEN5
GREEN6
GREEN7
GREEN8
GREEN9
DAVDD1.8V
RED0
RED1
RED2
RED3
RED4
RED5
RED6
RED7
RED8
RED9
DATACK
SOGOUT
HSOUT
VSOUT
O/E
BAIN1
VD1.8V
GAIN0
SOGIN0
GAIN1
SOGIN1
RAIN0
RAIN1
PWRDN
REFLO
NC
REFHI
3.3
C5673 0.1u 25V Z
C5676 10u 10V KZA176WJ
C5666 0.1u 25V Z
C5670 0.1u 25V Z
C5665 0.047u 16V
C5667 0.047u 16V
C5668 1000P
C5671 0.047u 16V
C5672 1000P
C5674 0.047u 16V
C5675 0.047u 16V
R5665 22
R5667 22
R5669 22
R5671 22
R5673 22
R5670 0
R5676 10K
TL5663
TL5657
TL5658
TL5659
TL5660
TL5661
PB_LPF
Y/G
Y/G32
Y_LPF
PR/R
PR_LPF
11
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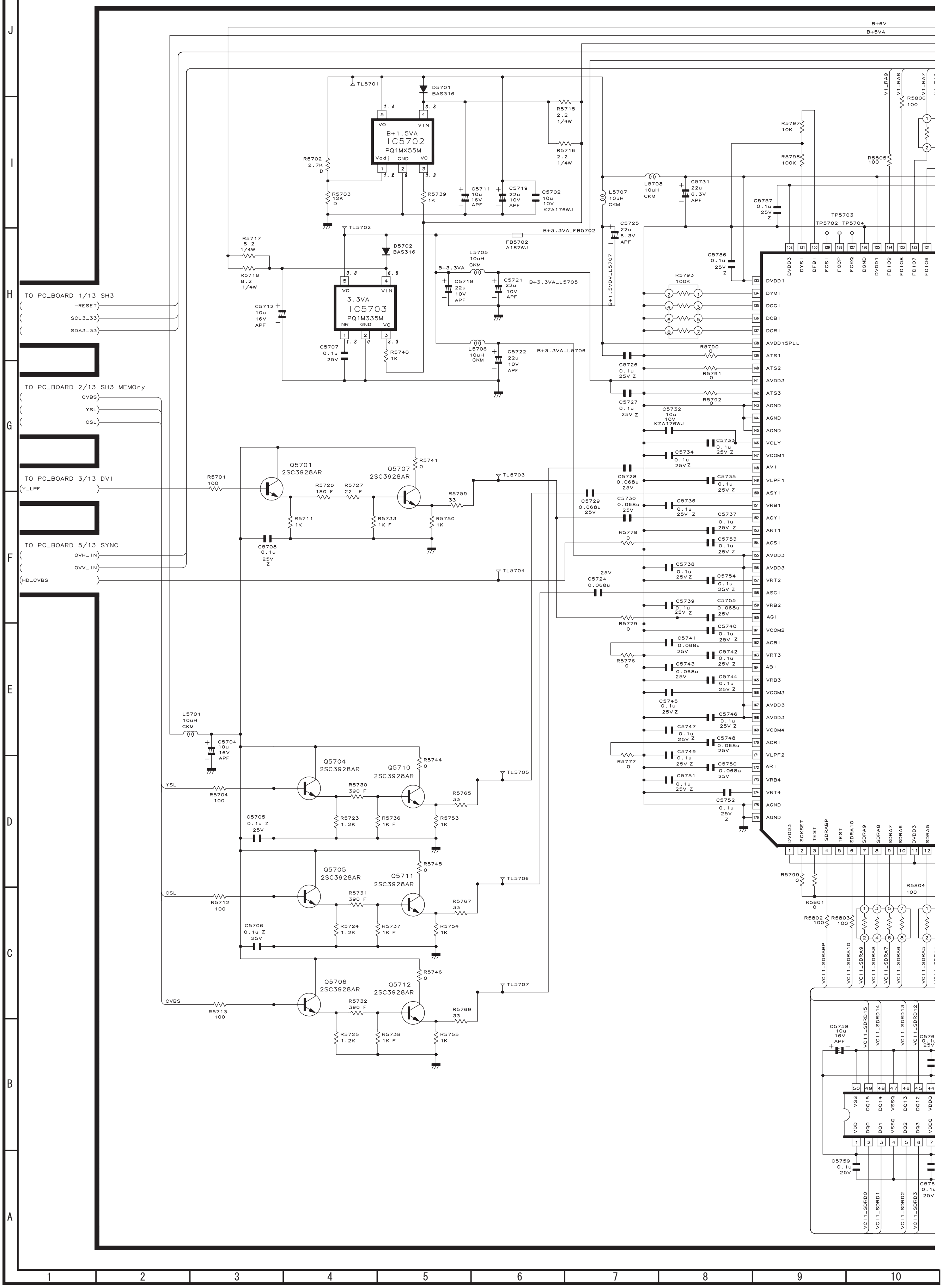
■PC I/F Unit-7



J
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G
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E
D
C
B
A
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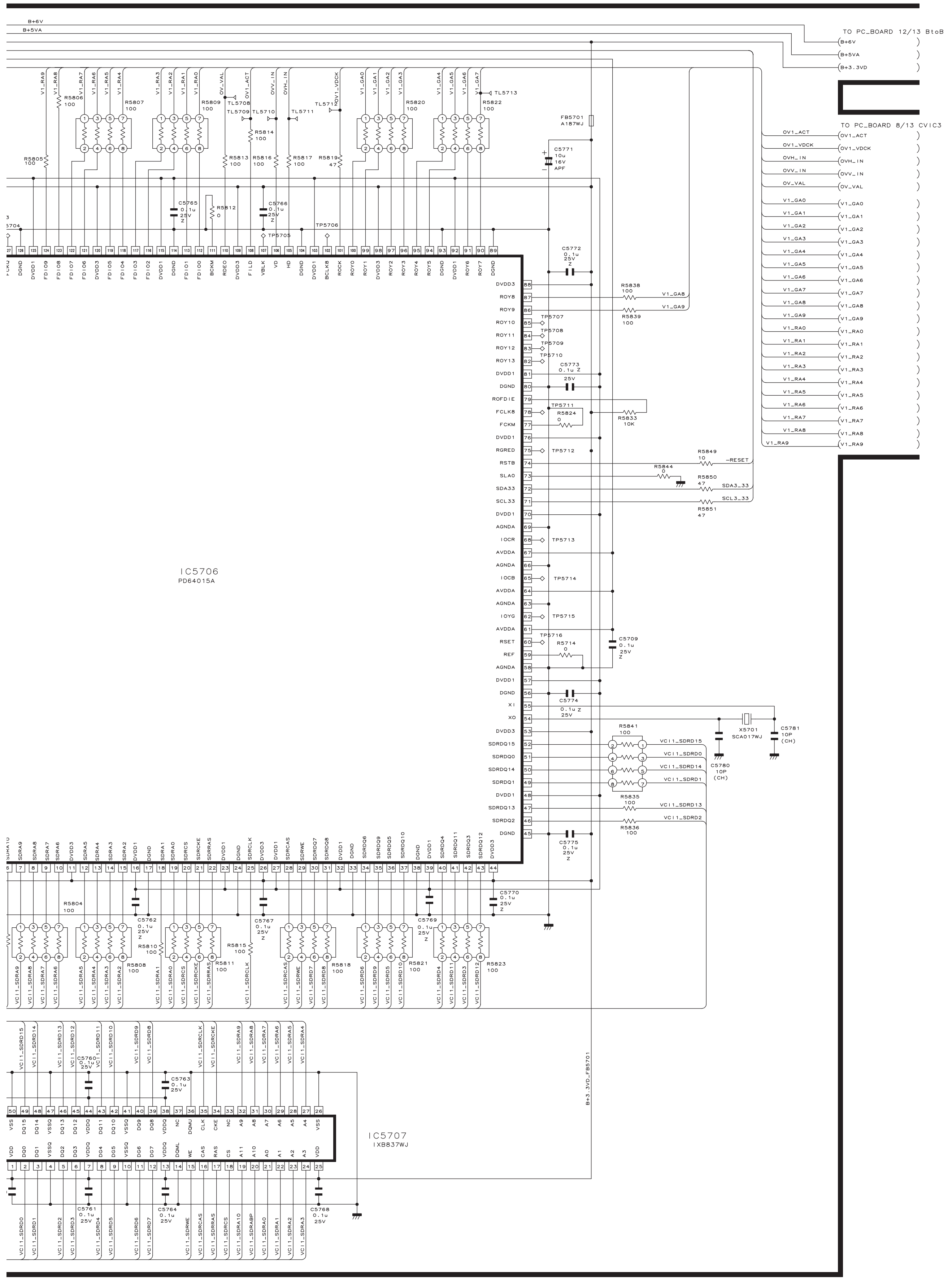
4
5
6
7
8
9
10
B+6V
B+5VA
TO PC_BOARD 1/13 SH3
-RESET
SCL3_33
SDA3_33
TO PC_BOARD 2/13 SH3 MEMOry
CVBS
YSL
CSL
TO PC_BOARD 3/13 DVI
Y_LPF
TO PC_BOARD 5/13 SYNC
OVH_IN
OVV_IN
HD_CVBS
TL5701
D5701 BAS316
B+1.5VA
IC5702
PQ1MX55M
R5702 2.7K D
R5703 12K D
R5739 1K
C5711 10u 16V APF
C5719 22u 10V APF
C5702 10u 10V KZA176WJ
R5715 2.2 1/4W
R5716 2.2 1/4W
TL5702
D5702 BAS316
3.3VA
IC5703
PQ1M335M
R5717 8.2 1/4W
R5718 8.2 1/4W
C5712 10u 16V APF
C5707 0.1u 25V
R5740 1K
L5705 10uH CKM
C5718 22u 10V APF
C5721 22u 10V APF
B+3.3VA_L5705
L5706 10uH CKM
C5722 22u 10V APF
B+3.3VA_L5706
FB5702 A187WJ
B+3.3VA_FB5702
L5707 10uH CKM
C5725 22u 6.3V APF
B+1.5VDV_L5707
L5708 10uH CKM
C5731 22u 6.3V APF
C5757 0.1u 25V Z
C5756 0.1u 25V Z
R5793 100K
R5797 10K
R5798 100K
R5805 100
R5806 100
TP5702
TP5703
TP5704
R5790 0
R5791 0
R5792 0
C5726 0.1u 25V Z
C5727 0.1u 25V Z
C5732 10u 10V KZA176WJ
Q5701 2SC3928AR
Q5707 2SC3928AR
R5701 100
R5720 180 F
R5727 22 F
R5741 0
R5759 33
TL5703
R5711 1K
R5733 1K F
R5750 1K
C5708 0.1u 25V Z
TL5704
C5724 0.068u 25V
C5728 0.068u 25V
C5729 0.068u 25V
C5730 0.068u 25V
R5778 0
R5779 0
R5776 0
R5777 0
L5701 10uH CKM
C5704 10u 16V APF
Q5704 2SC3928AR
Q5710 2SC3928AR
R5704 100
R5730 390 F
R5744 0
R5765 33
TL5705
R5723 1.2K
R5736 1K F
R5753 1K
C5705 0.1u Z 25V
Q5705 2SC3928AR
Q5711 2SC3928AR
R5712 100
R5731 390 F
R5745 0
R5767 33
TL5706
R5724 1.2K
R5737 1K F
R5754 1K
C5706 0.1u Z 25V
Q5706 2SC3928AR
Q5712 2SC3928AR
R5713 100
R5732 390 F
R5746 0
R5769 33
TL5707
R5725 1.2K
R5738 1K F
R5755 1K
DVDD1
DYMI
DCGI
DCBI
DCRI
AVDD15PLL
ATS1
ATS2
AVDD3
ATS3
AGND
VCLY
VCOM1
AVI
VLPF1
ASYI
VRB1
ACYI
ART1
ACSI
VRT2
ASCI
VRB2
AGI
VCOM2
ACBI
VRT3
ABI
VRB3
VCOM3
VCOM4
ACRI
VLPF2
ARI
VRB4
VRT4
DVDD3
DYSI
DFBI
FCSI
FOCP
FCKQ
DGND
FDI09
FDI08
FDI07
FDI06
SCKSET
TEST
SDRABP
SDRA10
SDRA9
SDRA8
SDRA7
SDRA6
SDRA5
R5799 0
R5801 0
R5802 100
R5803 100
R5804 100
VCI1_SDRABP
VCI1_SDRA10
VCI1_SDRA9
VCI1_SDRA8
VCI1_SDRA7
VCI1_SDRA6
VCI1_SDRA5
V1_RA9
V1_RA8
V1_RA7
C5758 10u 16V APF
C5759 0.1u 25V
VCI1_SDRD15
VCI1_SDRD14
VCI1_SDRD13
VCI1_SDRD12
VSS
DQ15
DQ14
VSSQ
DQ13
DQ12
VDDQ
VDD
DQ0
DQ1
DQ2
DQ3
VCI1_SDRD0
VCI1_SDRD1
VCI1_SDRD2
VCI1_SDRD3


B+6V
B+5VA
TO PC_BOARD 12/13 BtoB
B+3.3VD
TO PC_BOARD 8/13 CVIC3
OV1_ACT
OV1_VDCK
OVH_IN
OVV_IN
OV_VAL
V1_GA0
V1_GA1
V1_GA2
V1_GA3
V1_GA4
V1_GA5
V1_GA6
V1_GA7
V1_GA8
V1_GA9
V1_RA0
V1_RA1
V1_RA2
V1_RA3
V1_RA4
V1_RA5
V1_RA6
V1_RA7
V1_RA8
V1_RA9
IC5706
PD64015A
IC5707
IXB837WJ
FB5701
A187WJ
C5771
10u
16V
APF
X5701
SCA017WJ
C5780
10P
(CH)
C5781
10P
(CH)
-RESET
SDA3_33
SCL3_33
B+3.3VD_FB5701
R5838
R5839
R5833
10K
R5849
R5844
R5850
R5851
R5841
R5835
R5836
R5714
R5824
TP5705
TP5706
TP5707
TP5708
TP5709
TP5710
TP5711
TP5712
TP5713
TP5714
TP5715
TP5716
TL5708
TL5709
TL5710
TL5711
TL5712
TL5713
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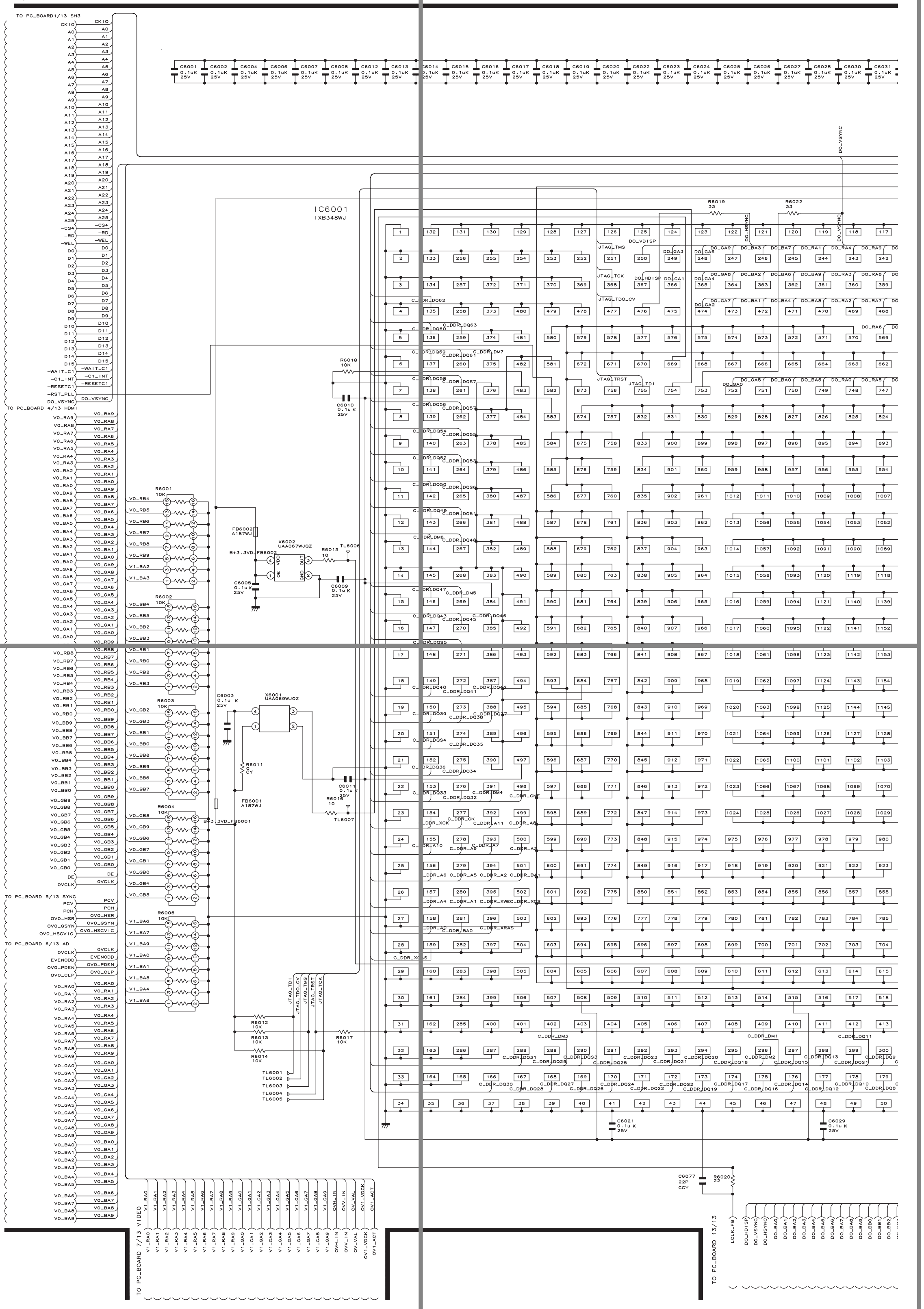
(1/8) Please peel off and refer to page 12-58.

(2/8) Please peel off and refer to page 12-59.

■PC I/F UNIT-8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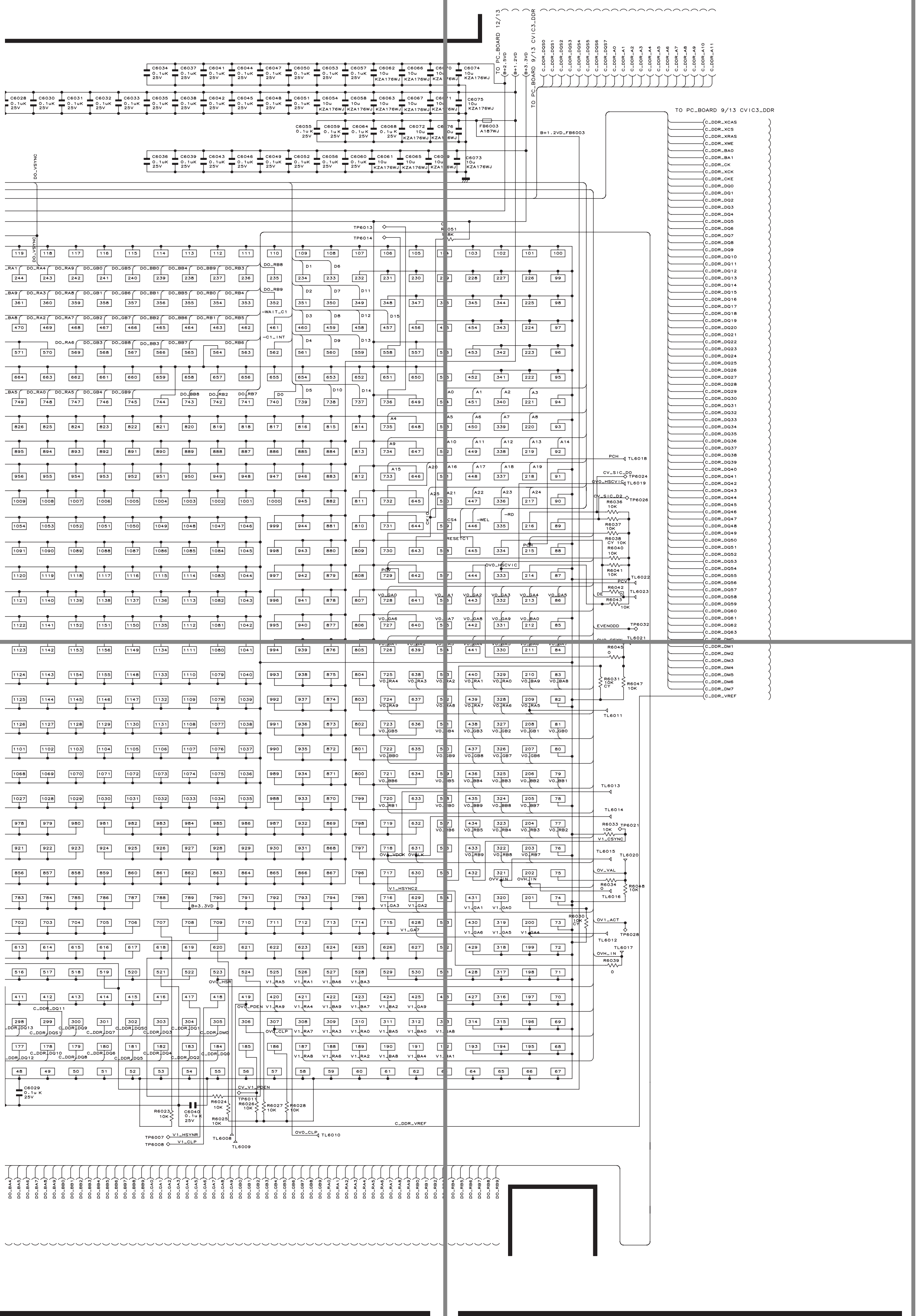
TO PC_BOARD 4/13 HDMI
TO PC_BOARD 5/13 SYNC
TO PC_BOARD 6/13 AD
TO PC_BOARD 7/13 VIDEO
TO PC_BOARD 13/13
IC6001
IXB348WJ
X6001
UAA069WJQZ
X6002
UAA067WJQZ
FB6001
A187WJ
FB6002
A187WJ
B+3.3VD_FB6001
B+3.3VD_FB6002
R6001 10K
R6002 10K
R6003 10K
R6004 10K
R6005 10K
R6011 0 CY
R6012 10K
R6013 10K
R6014 10K
R6015 10
R6016 10
R6017 10K
R6018 10K
R6019 33
R6020 22
R6022 33
C6003 0.1u K 25V
C6005 0.1u K 25V
C6009 0.1u K 25V
C6010 0.1u K 25V
C6011 0.1u K 25V
C6021 0.1u K 25V
C6029 0.1u K 25V
C6077 22P CCY
TL6001
TL6002
TL6003
TL6004
TL6005
TL6006
TL6007
JTAG_TMS
JTAG_TCK
JTAG_TDO_CV
JTAG_TRST
JTAG_TDI
D0_VSYNC
D0_VDISP
D0_HDISP
LCLK_FB

(5/8) Please peel off and refer to page 12-62.

(6/8) Please peel off and refer to page 12-63.

(3/8) Please peel off and refer to page 12-60.

(4/8) Please peel off and refer to page 12-61.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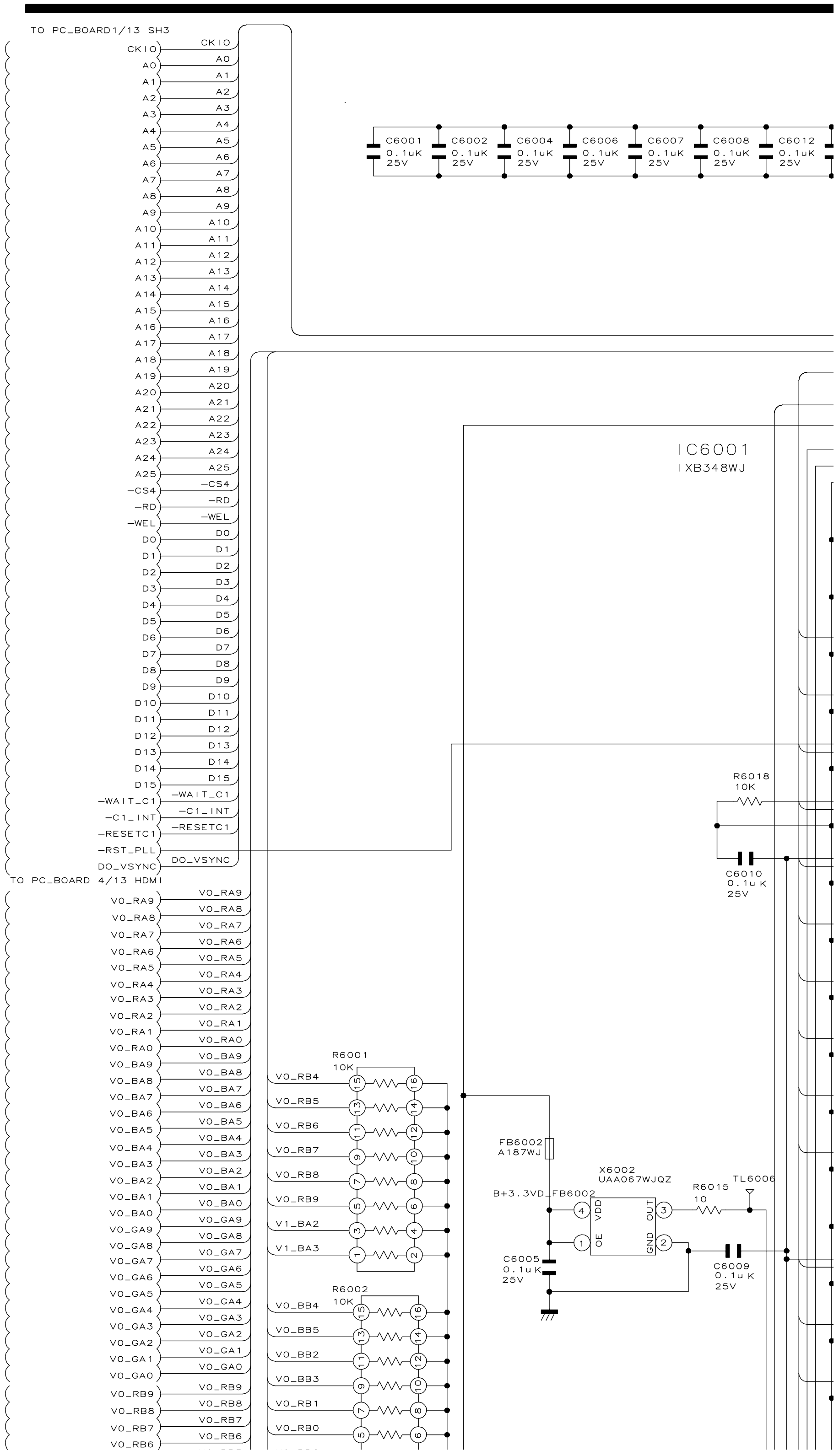
TO PC_BOARD 9/13 CVIC3_DDR
B+2.5VD
B+1.2VD
B+3.3VD
B+1.2VD_FB6003
FB6003
TO PC_BOARD 9/13 CVIC3_DDR
C_DDR_XCAS
C_DDR_XCS
C_DDR_XRAS
C_DDR_XWE
C_DDR_BA0
C_DDR_BA1
C_DDR_CK
C_DDR_XCK
C_DDR_CKE
C_DDR_VREF
TP6013
TP6014
R6051
TL6018
TP6024
TL6019
TP6026
TL6022
TL6023
TP6032
TL6021
TL6011
TL6013
TL6014
TP6021
TL6015
TL6020
TL6016
TP6028
TL6012
TL6017
C6029
R6023
C6040
R6024
R6025
R6026
R6027
R6028
TP6007
TP6008
TL6008
TL6009
TL6010
V1_HSYNR
V1_CLP
OVO_CLP
CV_V1_PDEN
C_DDR_VREF

(7/8) Please peel off and refer to page 12-64.

(8/8) Please peel off and refer to page 12-65.

■PC I/F UNIT-8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CKIO
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22
A23
A24
A25
-CS4
-RD
-WEL
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
-WAIT_C1
-C1_INT
-RESETC1
-RST_PLL
DO_VSYNC
TO PC_BOARD 4/13 HDMI
V0_RA9
V0_RA8
V0_RA7
V0_RA6
V0_RA5
V0_RA4
V0_RA3
V0_RA2
V0_RA1
V0_RA0
V0_BA9
V0_BA8
V0_BA7
V0_BA6
V0_BA5
V0_BA4
V0_BA3
V0_BA2
V0_BA1
V0_BA0
V0_GA9
V0_GA8
V0_GA7
V0_GA6
V0_GA5
V0_GA4
V0_GA3
V0_GA2
V0_GA1
V0_GA0
V0_RB9
V0_RB8
V0_RB7
V0_RB6
C6001 0.1uK 25V
C6002 0.1uK 25V
C6004 0.1uK 25V
C6006 0.1uK 25V
C6007 0.1uK 25V
C6008 0.1uK 25V
C6012 0.1uK 25V
IC6001
IXB348WJ
R6018 10K
C6010 0.1uK 25V
R6001 10K
V0_RB4
V0_RB5
V0_RB6
V0_RB7
V0_RB8
V0_RB9
V1_BA2
V1_BA3
R6002 10K
V0_BB4
V0_BB5
V0_BB2
V0_BB3
V0_RB1
V0_RB0
FB6002 A187WJ
X6002 UAA067WJQZ
B+3.3VD_FB6002
VDD
OE
OUT
GND
R6015 10
TL6006
C6005 0.1uK 25V
C6009 0.1uK 25V
J
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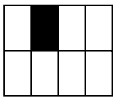

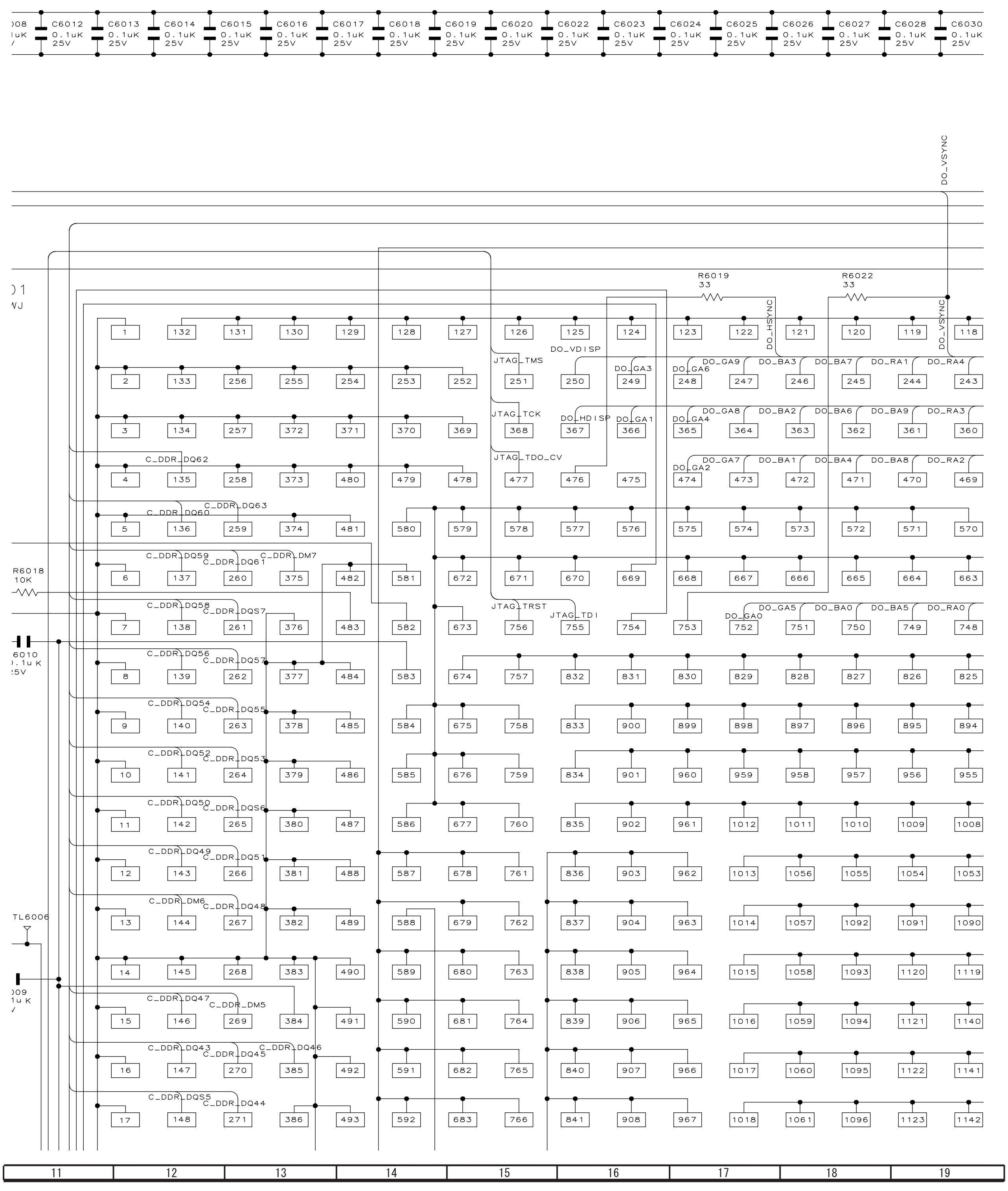

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luK
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C6012 0.1uK 25V
C6013 0.1uK 25V
C6014 0.1uK 25V
C6015 0.1uK 25V
C6016 0.1uK 25V
C6017 0.1uK 25V
C6018 0.1uK 25V
C6019 0.1uK 25V
C6020 0.1uK 25V
C6022 0.1uK 25V
C6023 0.1uK 25V
C6024 0.1uK 25V
C6025 0.1uK 25V
C6026 0.1uK 25V
C6027 0.1uK 25V
C6028 0.1uK 25V
C6030 0.1uK 25V
DO_VSYNC
R6019 33
R6022 33
DO_HSYNC
DO_VSYNC
)1
WJ
DO_VDISP
JTAG_TMS
DO_GA3
DO_GA6
DO_GA9
DO_BA3
DO_BA7
DO_RA1
DO_RA4
JTAG_TCK
DO_HDISP
DO_GA1
DO_GA4
DO_GA8
DO_BA2
DO_BA6
DO_BA9
DO_RA3
JTAG_TDO_CV
C_DDR_DQ62
DO_GA2
DO_GA7
DO_BA1
DO_BA4
DO_BA8
DO_RA2
C_DDR_DQ63
C_DDR_DQ60
C_DDR_DQ59
C_DDR_DQ61
C_DDR_DM7
R6018 10K
C_DDR_DQ58
C_DDR_DQS7
JTAG_TRST
JTAG_TDI
DO_GA5
DO_BA0
DO_BA5
DO_RA0
DO_GA0
6010 0.1uK 25V
C_DDR_DQ56
C_DDR_DQ57
C_DDR_DQ54
C_DDR_DQ55
C_DDR_DQ52
C_DDR_DQ53
C_DDR_DQ50
C_DDR_DQS6
C_DDR_DQ49
C_DDR_DQ51
C_DDR_DM6
C_DDR_DQ48
TL6006
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1uK
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C_DDR_DQ47
C_DDR_DM5
C_DDR_DQ43
C_DDR_DQ45
C_DDR_DQ46
C_DDR_DQS5
C_DDR_DQ44
1 132 131 130 129 128 127 126 125 124 123 122 121 120 119 118
2 133 256 255 254 253 252 251 250 249 248 247 246 245 244 243
3 134 257 372 371 370 369 368 367 366 365 364 363 362 361 360
4 135 258 373 480 479 478 477 476 475 474 473 472 471 470 469
5 136 259 374 481 580 579 578 577 576 575 574 573 572 571 570
6 137 260 375 482 581 672 671 670 669 668 667 666 665 664 663
7 138 261 376 483 582 673 756 755 754 753 752 751 750 749 748
8 139 262 377 484 583 674 757 832 831 830 829 828 827 826 825
9 140 263 378 485 584 675 758 833 900 899 898 897 896 895 894
10 141 264 379 486 585 676 759 834 901 960 959 958 957 956 955
11 142 265 380 487 586 677 760 835 902 961 1012 1011 1010 1009 1008
12 143 266 381 488 587 678 761 836 903 962 1013 1056 1055 1054 1053
13 144 267 382 489 588 679 762 837 904 963 1014 1057 1092 1091 1090
14 145 268 383 490 589 680 763 838 905 964 1015 1058 1093 1120 1119
15 146 269 384 491 590 681 764 839 906 965 1016 1059 1094 1121 1140
16 147 270 385 492 591 682 765 840 907 966 1017 1060 1095 1122 1141
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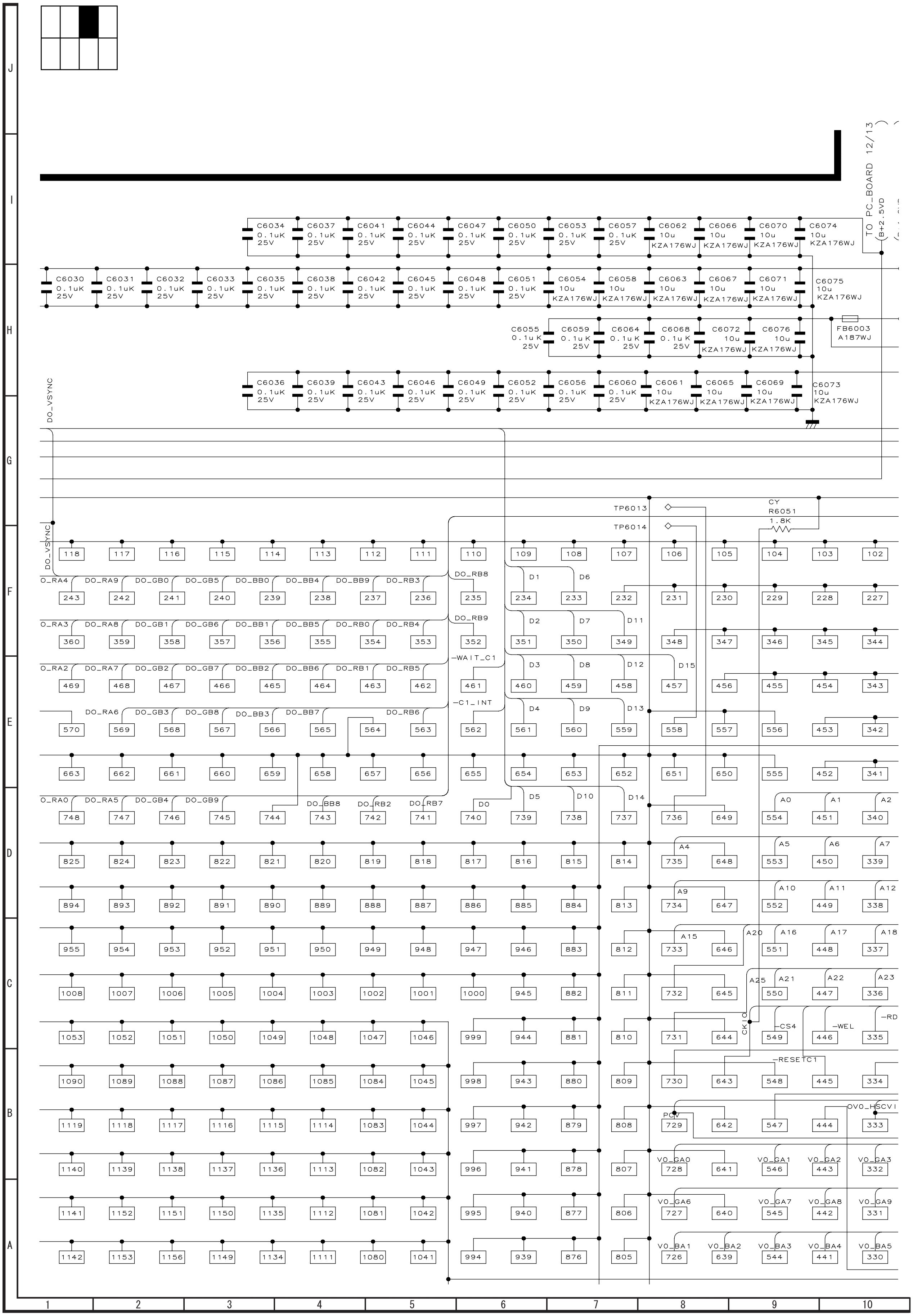
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TO PC_BOARD 12/13
(B+2.5VD
C6034 0.1uK 25V
C6037 0.1uK 25V
C6041 0.1uK 25V
C6044 0.1uK 25V
C6047 0.1uK 25V
C6050 0.1uK 25V
C6053 0.1uK 25V
C6057 0.1uK 25V
C6062 10u KZA176WJ
C6066 10u KZA176WJ
C6070 10u KZA176WJ
C6074 10u KZA176WJ
C6030 0.1uK 25V
C6031 0.1uK 25V
C6032 0.1uK 25V
C6033 0.1uK 25V
C6035 0.1uK 25V
C6038 0.1uK 25V
C6042 0.1uK 25V
C6045 0.1uK 25V
C6048 0.1uK 25V
C6051 0.1uK 25V
C6054 10u KZA176WJ
C6058 10u KZA176WJ
C6063 10u KZA176WJ
C6067 10u KZA176WJ
C6071 10u KZA176WJ
C6075 10u KZA176WJ
C6055 0.1uK 25V
C6059 0.1uK 25V
C6064 0.1uK 25V
C6068 0.1uK 25V
C6072 10u KZA176WJ
C6076 10u KZA176WJ
FB6003 A187WJ
C6036 0.1uK 25V
C6039 0.1uK 25V
C6043 0.1uK 25V
C6046 0.1uK 25V
C6049 0.1uK 25V
C6052 0.1uK 25V
C6056 0.1uK 25V
C6060 0.1uK 25V
C6061 10u KZA176WJ
C6065 10u KZA176WJ
C6069 10u KZA176WJ
C6073 10u KZA176WJ
DO_VSYNC
TP6013
TP6014
CY
R6051
1.8K
118 117 116 115 114 113 112 111 110 109 108 107 106 105 104 103 102
O_RA4 DO_RA9 DO_GB0 DO_GB5 DO_BB0 DO_BB4 DO_BB9 DO_RB3 DO_RB8 D1 D6
243 242 241 240 239 238 237 236 235 234 233 232 231 230 229 228 227
O_RA3 DO_RA8 DO_GB1 DO_GB6 DO_BB1 DO_BB5 DO_RB0 DO_RB4 DO_RB9 D2 D7 D11
360 359 358 357 356 355 354 353 352 351 350 349 348 347 346 345 344
O_RA2 DO_RA7 DO_GB2 DO_GB7 DO_BB2 DO_BB6 DO_RB1 DO_RB5 -WAIT_C1 D3 D8 D12 D15
469 468 467 466 465 464 463 462 461 460 459 458 457 456 455 454 343
DO_RA6 DO_GB3 DO_GB8 DO_BB3 DO_BB7 DO_RB6 -C1_INT D4 D9 D13
570 569 568 567 566 565 564 563 562 561 560 559 558 557 556 453 342
663 662 661 660 659 658 657 656 655 654 653 652 651 650 555 452 341
O_RA0 DO_RA5 DO_GB4 DO_GB9 DO_BB8 DO_RB2 DO_RB7 D0 D5 D10 D14 A0 A1 A2
748 747 746 745 744 743 742 741 740 739 738 737 736 649 554 451 340
A4 A5 A6 A7
825 824 823 822 821 820 819 818 817 816 815 814 735 648 553 450 339
A9 A10 A11 A12
894 893 892 891 890 889 888 887 886 885 884 813 734 647 552 449 338
A15 A20 A16 A17 A18
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A25 A21 A22 A23
1008 1007 1006 1005 1004 1003 1002 1001 1000 945 882 811 732 645 550 447 336
CK10 -CS4 -WEL -RD
1053 1052 1051 1050 1049 1048 1047 1046 999 944 881 810 731 644 549 446 335
-RESETC1
1090 1089 1088 1087 1086 1085 1084 1045 998 943 880 809 730 643 548 445 334
PCV OVO_HSCVI
1119 1118 1117 1116 1115 1114 1083 1044 997 942 879 808 729 642 547 444 333
VO_GA0 VO_GA1 VO_GA2 VO_GA3
1140 1139 1138 1137 1136 1113 1082 1043 996 941 878 807 728 641 546 443 332
VO_GA6 VO_GA7 VO_GA8 VO_GA9
1141 1152 1151 1150 1135 1112 1081 1042 995 940 877 806 727 640 545 442 331
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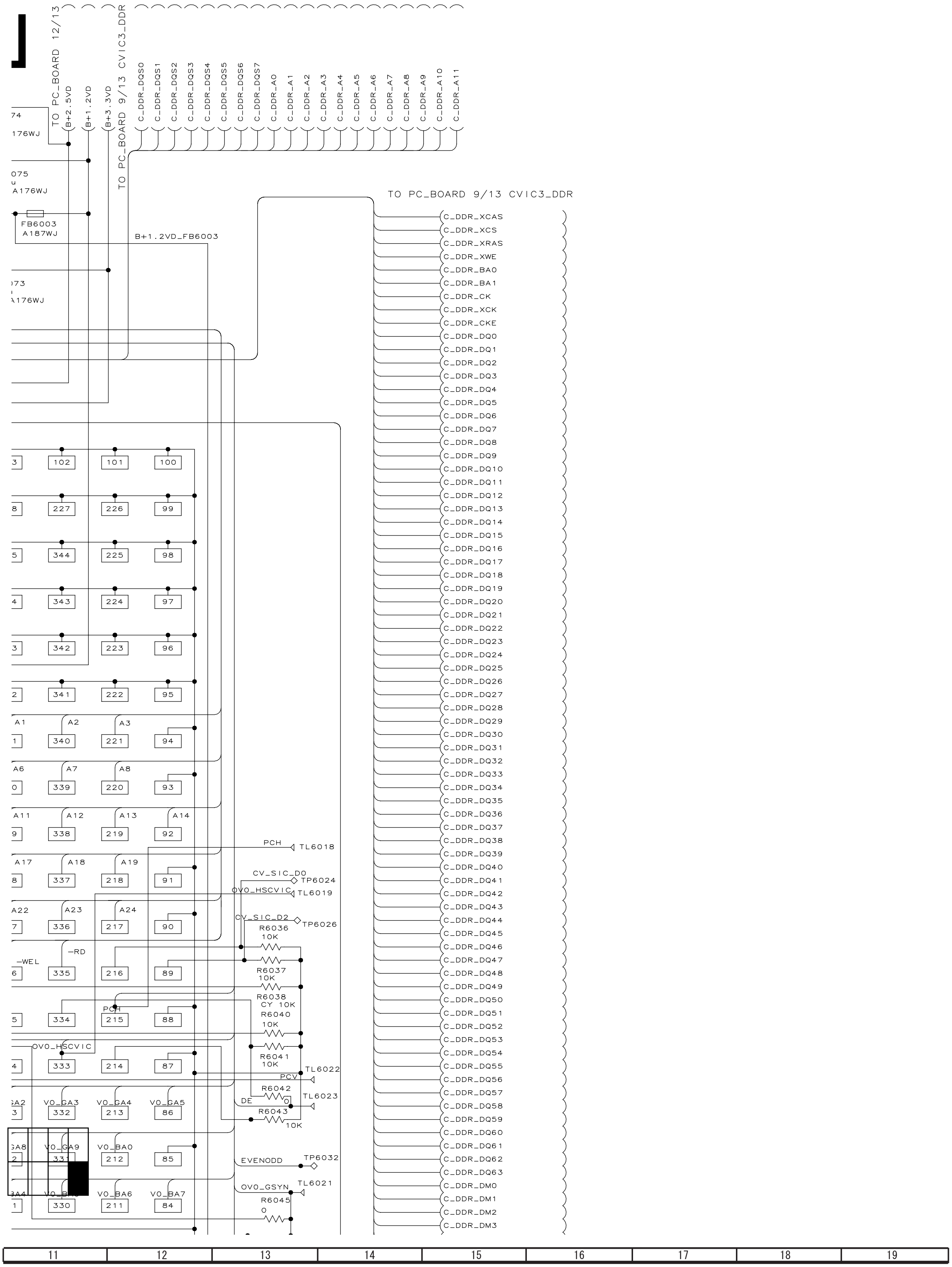
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B+1.2VD
B+3.3VD
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C_DDR_DQS1
C_DDR_DQS2
C_DDR_DQS3
C_DDR_DQS4
C_DDR_DQS5
C_DDR_DQS6
C_DDR_DQS7
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C_DDR_A1
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C_DDR_A3
C_DDR_A4
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C_DDR_A8
C_DDR_A9
C_DDR_A10
C_DDR_A11
74
176WJ
075
A176WJ
FB6003
A187WJ
B+1.2VD_FB6003
073
A176WJ
TO PC_BOARD 9/13 CVIC3_DDR
C_DDR_XCAS
C_DDR_XCS
C_DDR_XRAS
C_DDR_XWE
C_DDR_BA0
C_DDR_BA1
C_DDR_CK
C_DDR_XCK
C_DDR_CKE
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C_DDR_DQ1
C_DDR_DQ2
C_DDR_DQ3
C_DDR_DQ4
C_DDR_DQ5
C_DDR_DQ6
C_DDR_DQ7
C_DDR_DQ8
C_DDR_DQ9
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C_DDR_DQ63
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C_DDR_DM1
C_DDR_DM2
C_DDR_DM3
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A11
A12
A13
A14
338
219
92
PCH
TL6018
A17
A18
A19
337
218
91
CV_SIC_D0
TP6024
OV0_HSCVIC
TL6019
A22
A23
A24
336
217
90
CV_SIC_D2
TP6026
R6036
10K
-RD
-WEL
335
216
89
R6037
10K
R6038
CY 10K
R6040
10K
PCH
334
215
88
OV0_HSCVIC
R6041
10K
333
214
87
TL6022
PCV
R6042
0
TL6023
DE
R6043
10K
V0_GA3
V0_GA4
V0_GA5
332
213
86
V0_GA9
V0_BA0
331
212
85
EVENODD
TP6032
OV0_GSYN
TL6021
R6045
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V0_BA7
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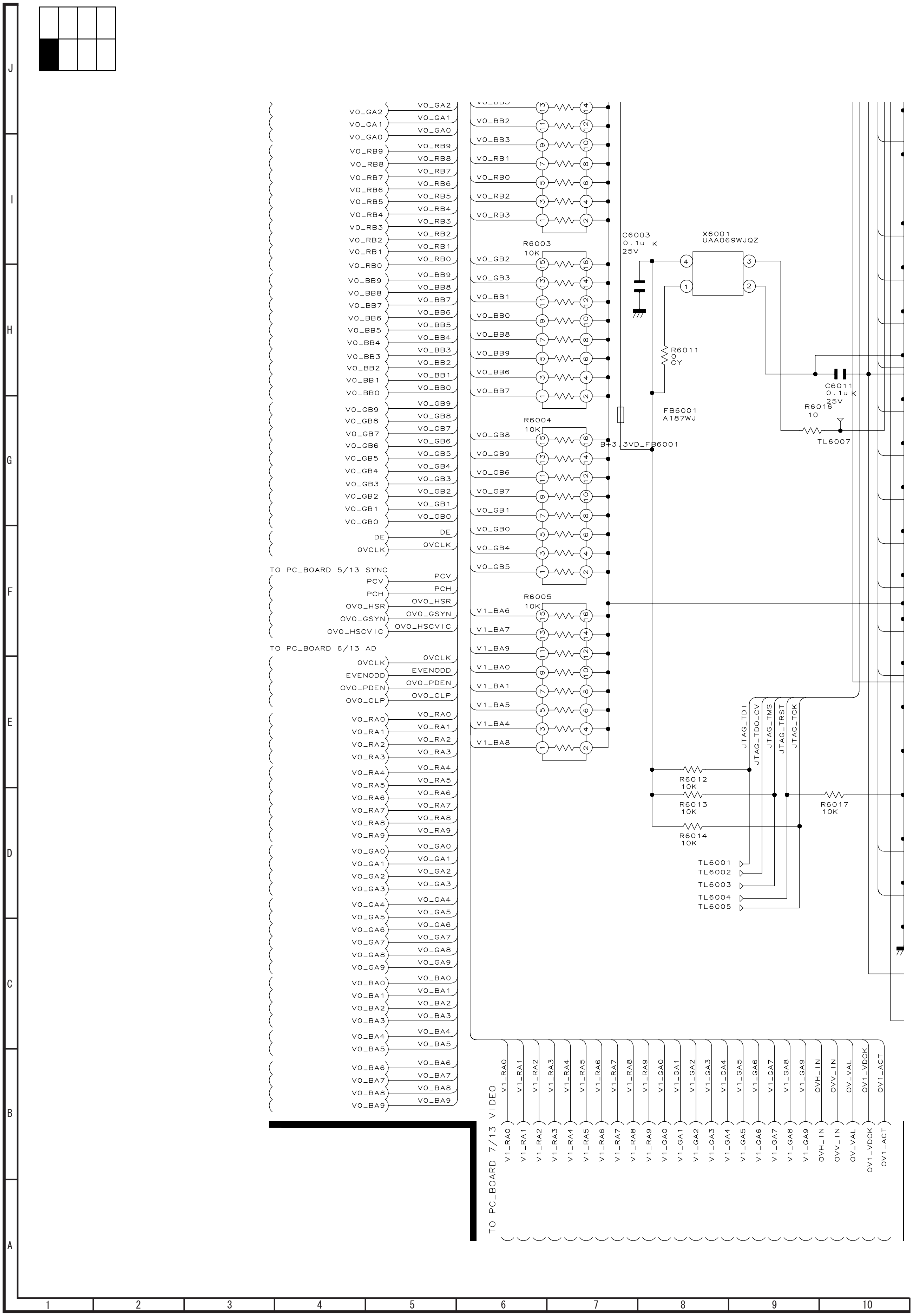
J
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V0_GA2
V0_GA1
V0_GA0
V0_RB9
V0_RB8
V0_RB7
V0_RB6
V0_RB5
V0_RB4
V0_RB3
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V0_BB9
V0_BB8
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V0_BB4
V0_BB3
V0_BB2
V0_BB1
V0_BB0
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V0_GB8
V0_GB7
V0_GB6
V0_GB5
V0_GB4
V0_GB3
V0_GB2
V0_GB1
V0_GB0
DE
OVCLK
TO PC_BOARD 5/13 SYNC
PCV
PCH
OV0_HSR
OV0_GSYN
OV0_HSCVIC
TO PC_BOARD 6/13 AD
OVCLK
EVENODD
OV0_PDEN
OV0_CLP
V0_RA0
V0_RA1
V0_RA2
V0_RA3
V0_RA4
V0_RA5
V0_RA6
V0_RA7
V0_RA8
V0_RA9
V0_GA0
V0_GA1
V0_GA2
V0_GA3
V0_GA4
V0_GA5
V0_GA6
V0_GA7
V0_GA8
V0_GA9
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V0_BA1
V0_BA2
V0_BA3
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V0_BA6
V0_BA7
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V0_BB3
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V0_RB2
V0_RB3
R6003
10K
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V0_GB3
V0_BB1
V0_BB0
V0_BB8
V0_BB9
V0_BB6
V0_BB7
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V0_GB9
V0_GB6
V0_GB7
V0_GB1
V0_GB0
V0_GB4
V0_GB5
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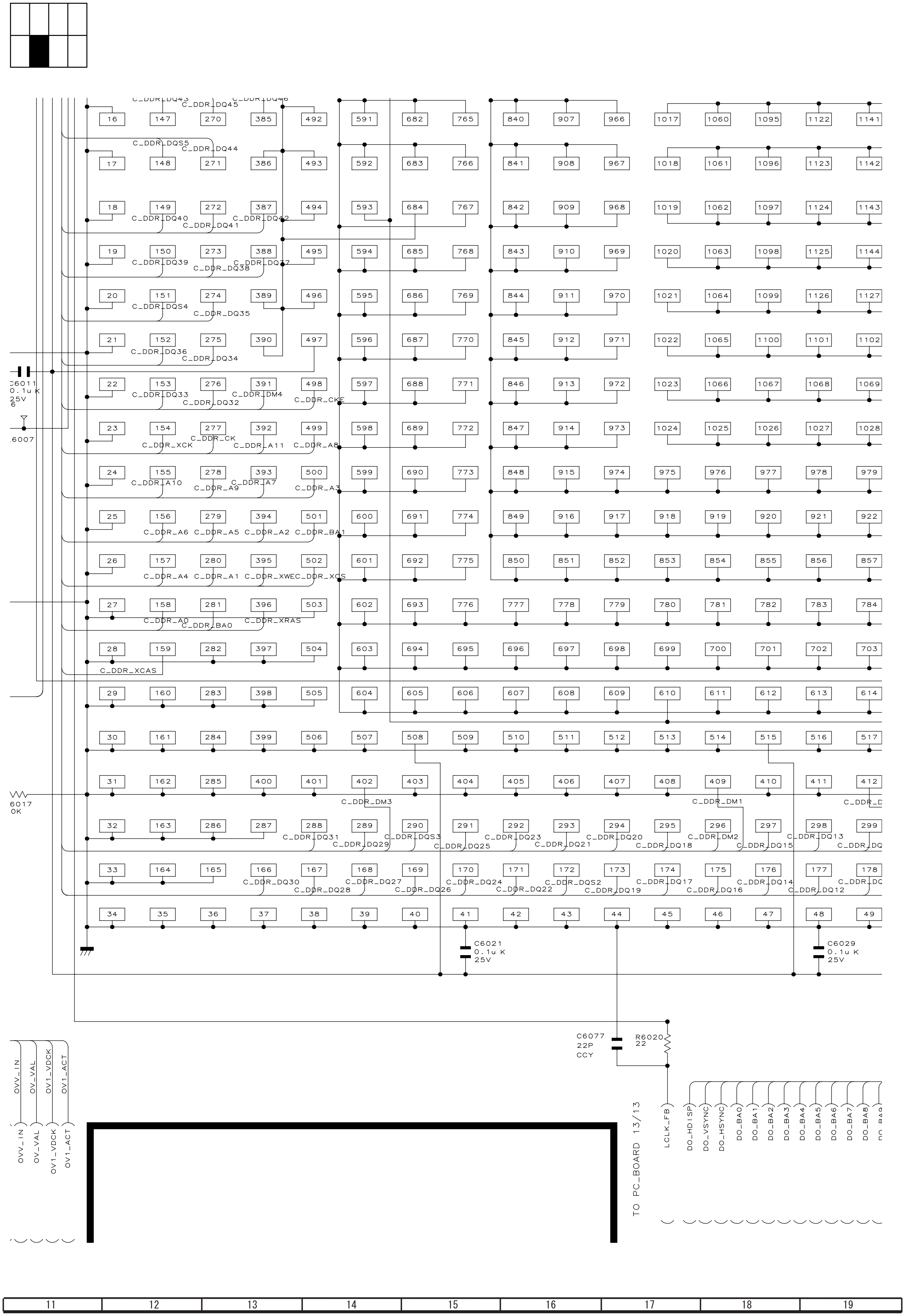
V1_BA9
V1_BA0
V1_BA1
V1_BA5
V1_BA4
V1_BA8
B+3.3VD_FB6001
C6003
0.1u K
25V
X6001
UAA069WJQZ
R6011
0
CY
FB6001
A187WJ
C6011
0.1u K
25V
R6016
10
TL6007
JTAG_TDI
JTAG_TDO_CV
JTAG_TMS
JTAG_TRST
JTAG_TCK
R6012
10K
R6013
10K
R6014
10K
R6017
10K
TL6001
TL6002
TL6003
TL6004
TL6005
TO PC_BOARD 7/13 VIDEO
V1_RA0
V1_RA1
V1_RA2
V1_RA3
V1_RA4
V1_RA5
V1_RA6
V1_RA7
V1_RA8
V1_RA9
V1_GA0
V1_GA1
V1_GA2
V1_GA3
V1_GA4
V1_GA5
V1_GA6
V1_GA7
V1_GA8
V1_GA9
OVH_IN
OVV_IN
OV_VAL
OV1_VDCK
OV1_ACT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C_DDR_DQ42
C_DDR_DQ39
C_DDR_DQ38
C_DDR_DQ37
C_DDR_DQS4
C_DDR_DQ35
C_DDR_DQ36
C_DDR_DQ34
C_DDR_DQ33
C_DDR_DQ32
C_DDR_DM4
C_DDR_CKE
C_DDR_XCK
C_DDR_CK
C_DDR_A11
C_DDR_A8
C_DDR_A10
C_DDR_A9
C_DDR_A7
C_DDR_A3
C_DDR_A6
C_DDR_A5
C_DDR_A2
C_DDR_BA1
C_DDR_A4
C_DDR_A1
C_DDR_XWE
C_DDR_XCS
C_DDR_A0
C_DDR_BA0
C_DDR_XRAS
C_DDR_XCAS
C_DDR_DM3
C_DDR_DM1
C_DDR_DQ31
C_DDR_DQ29
C_DDR_DQS3
C_DDR_DQ25
C_DDR_DQ23
C_DDR_DQ21
C_DDR_DQ20
C_DDR_DQ18
C_DDR_DM2
C_DDR_DQ15
C_DDR_DQ13
C_DDR_DQ30
C_DDR_DQ28
C_DDR_DQ27
C_DDR_DQ26
C_DDR_DQ24
C_DDR_DQ22
C_DDR_DQS2
C_DDR_DQ19
C_DDR_DQ17
C_DDR_DQ16
C_DDR_DQ14
C_DDR_DQ12
C6011
0.1u K
25V
6007
6017
0K
C6021
0.1u K
25V
C6029
0.1u K
25V
C6077
22P
CCY
R6020
22
OVV_IN
OV_VAL
OV1_VDCK
OV1_ACT
TO PC_BOARD 13/13
LCLK_FB
DO_HDISP
DO_VSYNC
DO_HSYNC
DO_BA0
DO_BA1
DO_BA2
DO_BA3
DO_BA4
DO_BA5
DO_BA6
DO_BA7
DO_BA8
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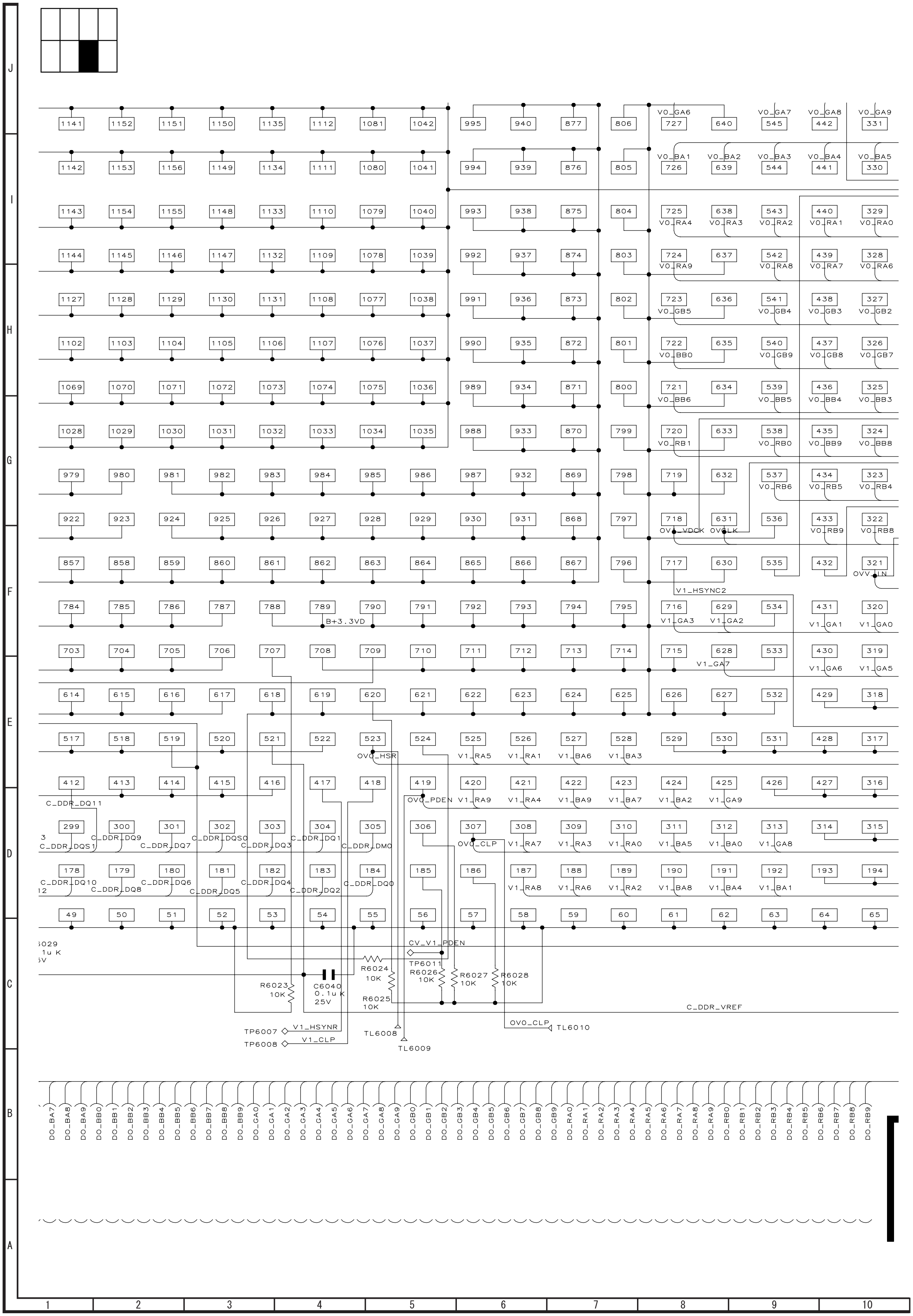
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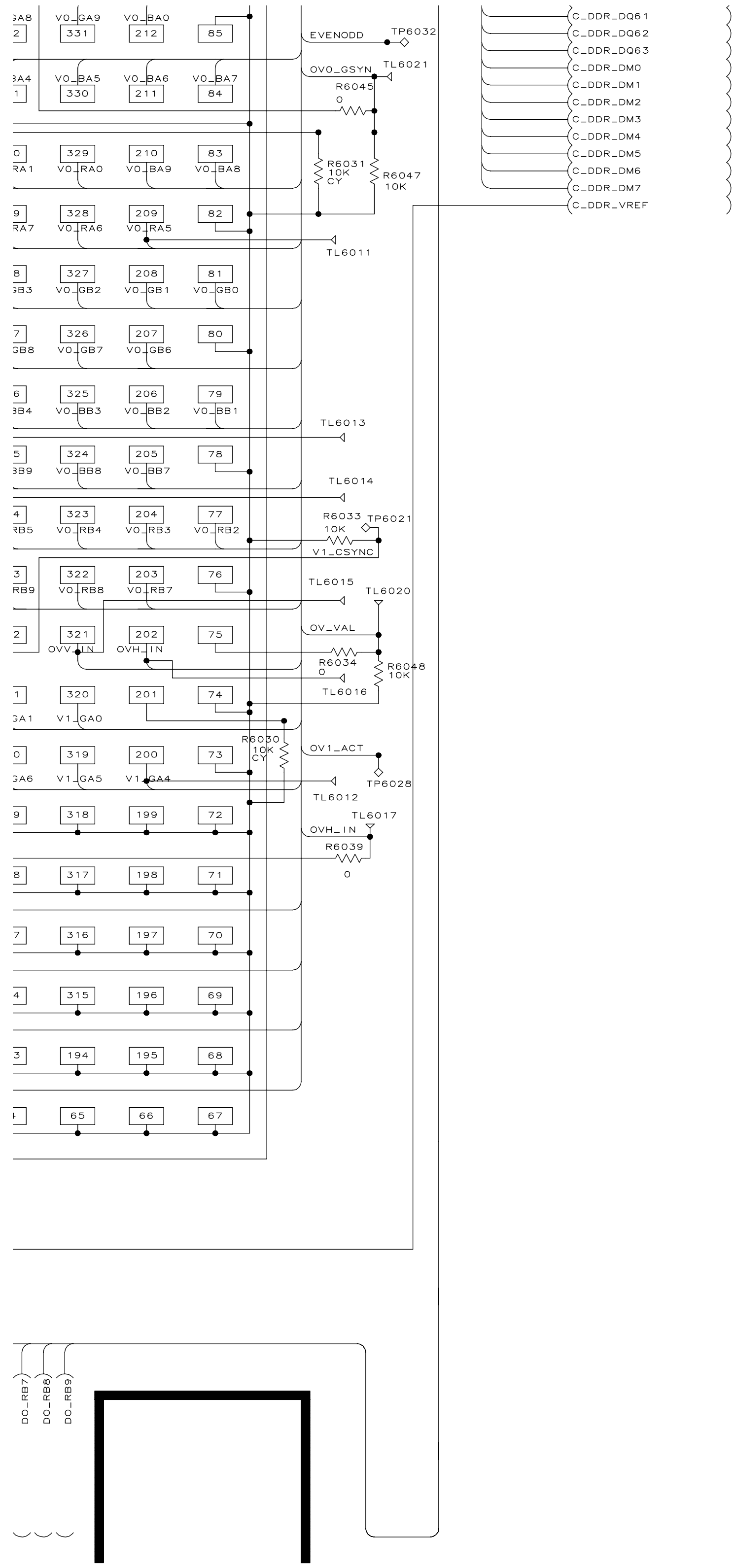
10
1141 1152 1151 1150 1135 1112 1081 1042 995 940 877 806 727 640 545 442 331
V0_GA6 V0_GA7 V0_GA8 V0_GA9
1142 1153 1156 1149 1134 1111 1080 1041 994 939 876 805 726 639 544 441 330
V0_BA1 V0_BA2 V0_BA3 V0_BA4 V0_BA5
1143 1154 1155 1148 1133 1110 1079 1040 993 938 875 804 725 638 543 440 329
V0_RA4 V0_RA3 V0_RA2 V0_RA1 V0_RA0
1144 1145 1146 1147 1132 1109 1078 1039 992 937 874 803 724 637 542 439 328
V0_RA9 V0_RA8 V0_RA7 V0_RA6
1127 1128 1129 1130 1131 1108 1077 1038 991 936 873 802 723 636 541 438 327
V0_GB5 V0_GB4 V0_GB3 V0_GB2
1102 1103 1104 1105 1106 1107 1076 1037 990 935 872 801 722 635 540 437 326
V0_BB0 V0_GB9 V0_GB8 V0_GB7
1069 1070 1071 1072 1073 1074 1075 1036 989 934 871 800 721 634 539 436 325
V0_BB6 V0_BB5 V0_BB4 V0_BB3
1028 1029 1030 1031 1032 1033 1034 1035 988 933 870 799 720 633 538 435 324
V0_RB1 V0_RB0 V0_BB9 V0_BB8
979 980 981 982 983 984 985 986 987 932 869 798 719 632 537 434 323
V0_RB6 V0_RB5 V0_RB4
922 923 924 925 926 927 928 929 930 931 868 797 718 631 536 433 322
OV0_VDCK OV0CLK V0_RB9 V0_RB8
857 858 859 860 861 862 863 864 865 866 867 796 717 630 535 432 321
OVV_IN
V1_HSYNC2
784 785 786 787 788 789 790 791 792 793 794 795 716 629 534 431 320
B+3.3VD
V1_GA3 V1_GA2 V1_GA1 V1_GA0
703 704 705 706 707 708 709 710 711 712 713 714 715 628 533 430 319
V1_GA7 V1_GA6 V1_GA5
614 615 616 617 618 619 620 621 622 623 624 625 626 627 532 429 318
517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 428 317
OV0_HSR V1_RA5 V1_RA1 V1_BA6 V1_BA3
412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 316
C_DDR_DQ11
OV0_PDEN V1_RA9 V1_RA4 V1_BA9 V1_BA7 V1_BA2 V1_GA9
299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315
3
C_DDR_DQS1 C_DDR_DQ9 C_DDR_DQ7 C_DDR_DQS0 C_DDR_DQ3 C_DDR_DQ1 C_DDR_DM0
OV0_CLP V1_RA7 V1_RA3 V1_RA0 V1_BA5 V1_BA0 V1_GA8
178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194
C_DDR_DQ10
12
C_DDR_DQ8 C_DDR_DQ6 C_DDR_DQ5 C_DDR_DQ4 C_DDR_DQ2 C_DDR_DQ0
V1_RA8 V1_RA6 V1_RA2 V1_BA8 V1_BA4 V1_BA1
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65
6029
1u K
5V
CV_V1_PDEN
TP6011
R6024
10K
R6026
10K
R6027
10K
R6028
10K
R6023
10K
C6040
0.1u K
25V
R6025
10K
C_DDR_VREF
TP6007
V1_HSYNR
TP6008
V1_CLP
TL6008
TL6009
OV0_CLP
TL6010
D0_BA7 D0_BA8 D0_BA9 D0_BB0 D0_BB1 D0_BB2 D0_BB3 D0_BB4 D0_BB5 D0_BB6 D0_BB7 D0_BB8 D0_BB9 D0_GA0 D0_GA1 D0_GA2 D0_GA3 D0_GA4 D0_GA5 D0_GA6 D0_GA7 D0_GA8 D0_GA9 D0_GB0 D0_GB1 D0_GB2 D0_GB3 D0_GB4 D0_GB5 D0_GB6 D0_GB7 D0_GB8 D0_GB9 D0_RA0 D0_RA1 D0_RA2 D0_RA3 D0_RA4 D0_RA5 D0_RA6 D0_RA7 D0_RA8 D0_RA9 D0_RB0 D0_RB1 D0_RB2 D0_RB3 D0_RB4 D0_RB5 D0_RB6 D0_RB7 D0_RB8 D0_RB9


EVENODD
TP6032
OV0_GSYN
TL6021
R6045
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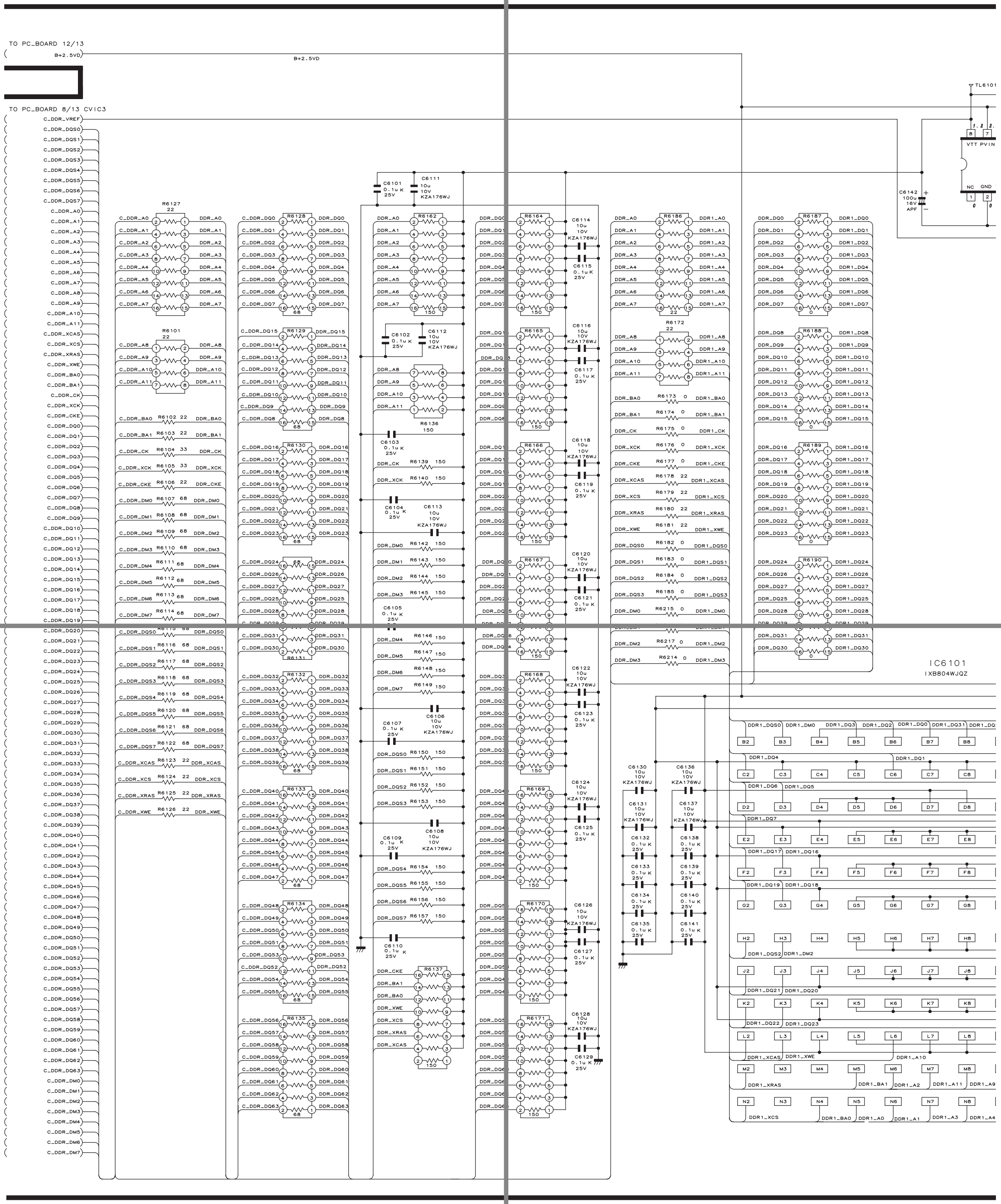
R6031
10K
CY
R6047
10K
TL6011
TL6013
TL6014
R6033
10K
TP6021
V1_CSYNC
TL6015
TL6020
OV_VAL
R6034
0
R6048
10K
TL6016
R6030
10K
CY
OV1_ACT
TP6028
TL6012
TL6017
OVH_IN
R6039
0
C_DDR_DQ61
C_DDR_DQ62
C_DDR_DQ63
C_DDR_DM0
C_DDR_DM1
C_DDR_DM2
C_DDR_DM3
C_DDR_DM4
C_DDR_DM5
C_DDR_DM6
C_DDR_DM7
C_DDR_VREF
V0_GA9
V0_BA0
V0_BA5
V0_BA6
V0_BA7
V0_RA0
V0_BA9
V0_BA8
V0_RA6
V0_RA5
V0_GB2
V0_GB1
V0_GB0
V0_GB7
V0_GB6
V0_BB3
V0_BB2
V0_BB1
V0_BB8
V0_BB7
V0_RB4
V0_RB3
V0_RB2
V0_RB8
V0_RB7
OVV_IN
OVH_IN
V1_GA0
V1_GA5
V1_GA4
331
212
85
330
211
84
329
210
83
328
209
82
327
208
81
326
207
80
325
206
79
324
205
78
323
204
77
322
203
76
321
202
75
320
201
74
319
200
73
318
199
72
317
198
71
316
197
70
315
196
69
194
195
68
65
66
67
DO_RB7
DO_RB8
DO_RB9

11	12	13	14	15	16	17	18	19

(1/8) Please peel off and refer to page 12-68.

(2/8) Please peel off and refer to page 12-69.

■PC I/F UNIT-9



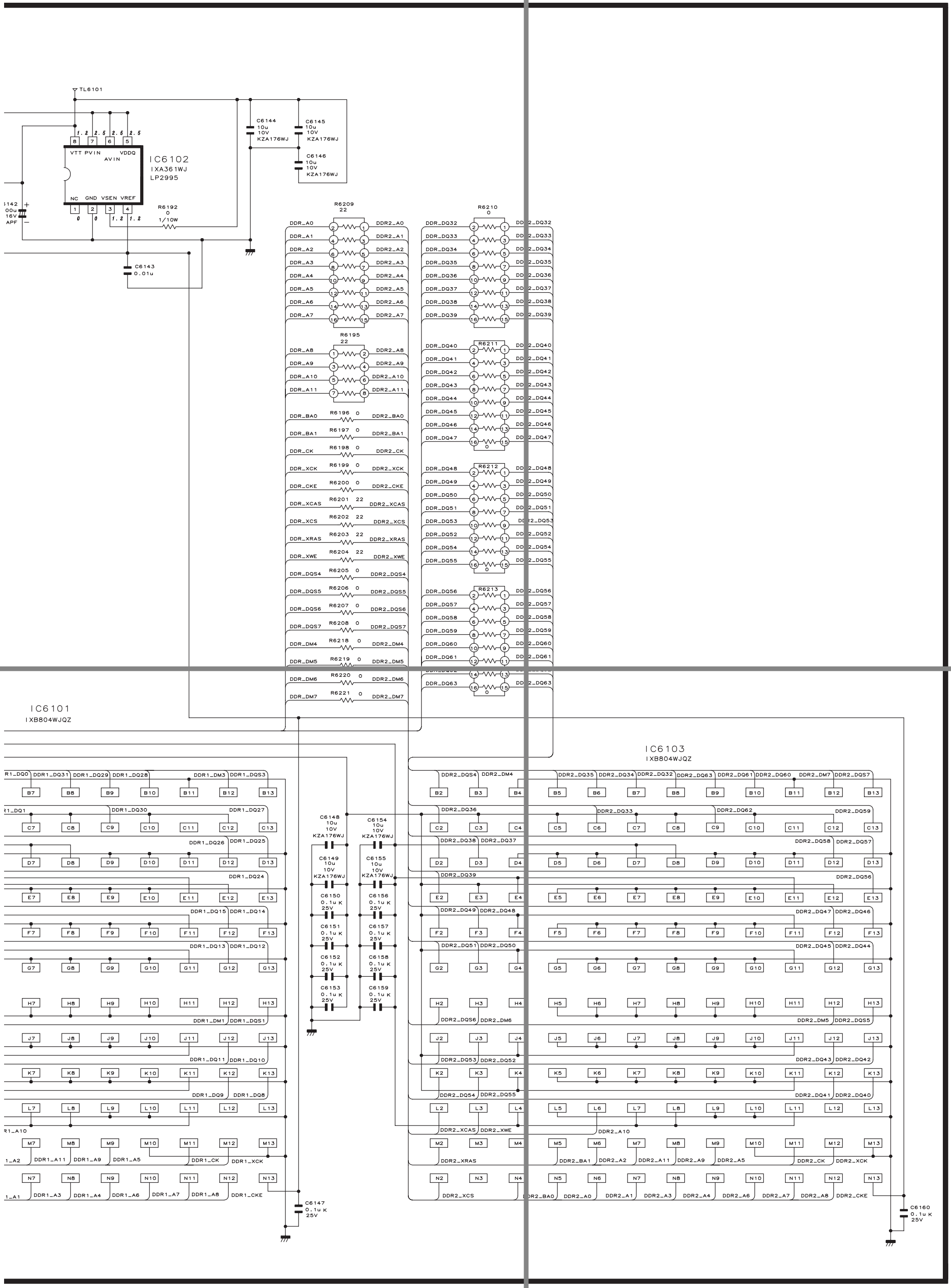
TO PC_BOARD 12/13
B+2.5VD
TO PC_BOARD 8/13 CVIC3
TL6101
IC6101
IXB804WJQZ

(5/8) Please peel off and refer to page 12-72.

(6/8) Please peel off and refer to page 12-73.

(3/8) Please peel off and refer to page 12-70.

(4/8) Please peel off and refer to page 12-71.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IC6102
IXA361WJ
LP2995
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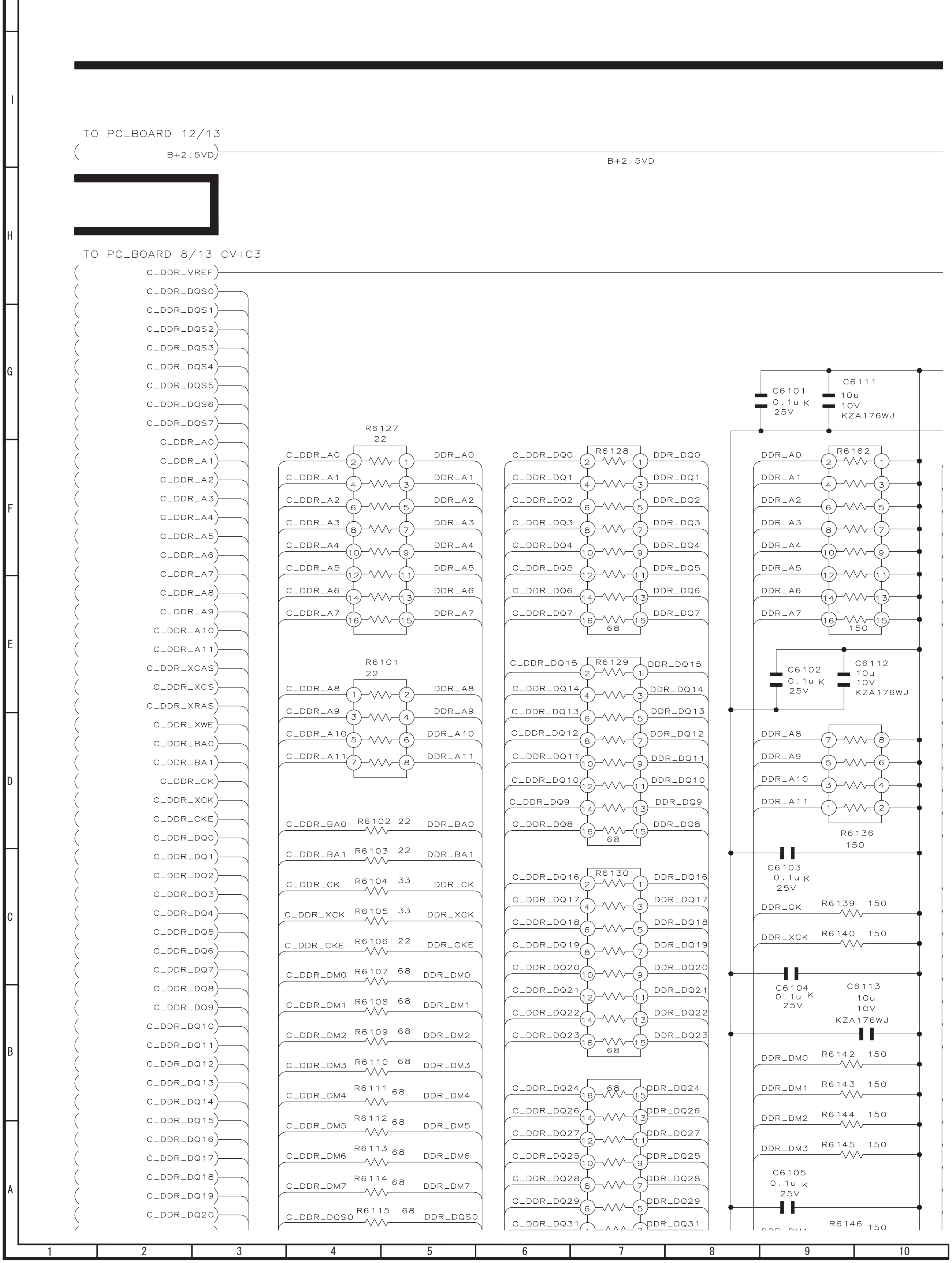
C6145 10u 10V KZA176WJ
C6146 10u 10V KZA176WJ
C6143 0.01u
R6192 0 1/10W
R6209 22
R6210 0
R6195 22
R6211
R6212
R6213
IC6101
IXB804WJQZ
IC6103
IXB804WJQZ
C6147 0.1u K 25V
C6148 10u 10V KZA176WJ
C6149 10u 10V KZA176WJ
C6150 0.1u K 25V
C6151 0.1u K 25V
C6152 0.1u K 25V
C6153 0.1u K 25V
C6154 10u 10V KZA176WJ
C6155 10u 10V KZA176WJ
C6156 0.1u K 25V
C6157 0.1u K 25V
C6158 0.1u K 25V
C6159 0.1u K 25V
C6160 0.1u K 25V

(7/8) Please peel off and refer to page 12-72.

(8/8) Please peel off and refer to page 12-73.

■PC I/F UNIT-9


TO PC_BOARD 12/13
B+2.5VD
B+2.5VD
TO PC_BOARD 8/13 CVIC3
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C_DDR_DQS1
C_DDR_DQS2
C_DDR_DQS3
C_DDR_DQS4
C_DDR_DQS5
C_DDR_DQS6
C_DDR_DQS7
C_DDR_A0
C_DDR_A1
C_DDR_A2
C_DDR_A3
C_DDR_A4
C_DDR_A5
C_DDR_A6
C_DDR_A7
C_DDR_A8
C_DDR_A9
C_DDR_A10
C_DDR_A11
C_DDR_XCAS
C_DDR_XCS
C_DDR_XRAS
C_DDR_XWE
C_DDR_BA0
C_DDR_BA1
C_DDR_CK
C_DDR_XCK
C_DDR_CKE
C_DDR_DQ0
C_DDR_DQ1
C_DDR_DQ2
C_DDR_DQ3
C_DDR_DQ4
C_DDR_DQ5
C_DDR_DQ6
C_DDR_DQ7
C_DDR_DQ8
C_DDR_DQ9
C_DDR_DQ10
C_DDR_DQ11
C_DDR_DQ12
C_DDR_DQ13
C_DDR_DQ14
C_DDR_DQ15
C_DDR_DQ16
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C_DDR_DQ18
C_DDR_DQ19
C_DDR_DQ20
R6127
22
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C_DDR_A1 DDR_A1
C_DDR_A2 DDR_A2
C_DDR_A3 DDR_A3
C_DDR_A4 DDR_A4
C_DDR_A5 DDR_A5
C_DDR_A6 DDR_A6
C_DDR_A7 DDR_A7
R6101
22
C_DDR_A8 DDR_A8
C_DDR_A9 DDR_A9
C_DDR_A10 DDR_A10
C_DDR_A11 DDR_A11
C_DDR_BA0 R6102 22 DDR_BA0
C_DDR_BA1 R6103 22 DDR_BA1
C_DDR_CK R6104 33 DDR_CK
C_DDR_XCK R6105 33 DDR_XCK
C_DDR_CKE R6106 22 DDR_CKE
C_DDR_DM0 R6107 68 DDR_DM0
C_DDR_DM1 R6108 68 DDR_DM1
C_DDR_DM2 R6109 68 DDR_DM2
C_DDR_DM3 R6110 68 DDR_DM3
C_DDR_DM4 R6111 68 DDR_DM4
C_DDR_DM5 R6112 68 DDR_DM5
C_DDR_DM6 R6113 68 DDR_DM6
C_DDR_DM7 R6114 68 DDR_DM7
C_DDR_DQS0 R6115 68 DDR_DQS0
R6128
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C_DDR_DQ2 DDR_DQ2
C_DDR_DQ3 DDR_DQ3
C_DDR_DQ4 DDR_DQ4
C_DDR_DQ5 DDR_DQ5
C_DDR_DQ6 DDR_DQ6
C_DDR_DQ7 DDR_DQ7
68
R6129
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C_DDR_DQ14 DDR_DQ14
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C_DDR_DQ12 DDR_DQ12
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C_DDR_DQ10 DDR_DQ10
C_DDR_DQ9 DDR_DQ9
C_DDR_DQ8 DDR_DQ8
68
R6130
C_DDR_DQ16 DDR_DQ16
C_DDR_DQ17 DDR_DQ17
C_DDR_DQ18 DDR_DQ18
C_DDR_DQ19 DDR_DQ19
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C_DDR_DQ21 DDR_DQ21
C_DDR_DQ22 DDR_DQ22
C_DDR_DQ23 DDR_DQ23
68
68
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C_DDR_DQ27 DDR_DQ27
C_DDR_DQ25 DDR_DQ25
C_DDR_DQ28 DDR_DQ28
C_DDR_DQ29 DDR_DQ29
C_DDR_DQ31 DDR_DQ31
C6101
0.1u K
25V
C6111
10u
10V
KZA176WJ
R6162
DDR_A0
DDR_A1
DDR_A2
DDR_A3
DDR_A4
DDR_A5
DDR_A6
DDR_A7
150
C6102
0.1u K
25V
C6112
10u
10V
KZA176WJ
DDR_A8
DDR_A9
DDR_A10
DDR_A11
R6136
150
C6103
0.1u K
25V
DDR_CK R6139 150
DDR_XCK R6140 150
C6104
0.1u K
25V
C6113
10u
10V
KZA176WJ
DDR_DM0 R6142 150
DDR_DM1 R6143 150
DDR_DM2 R6144 150
DDR_DM3 R6145 150
C6105
0.1u K
25V
R6146 150
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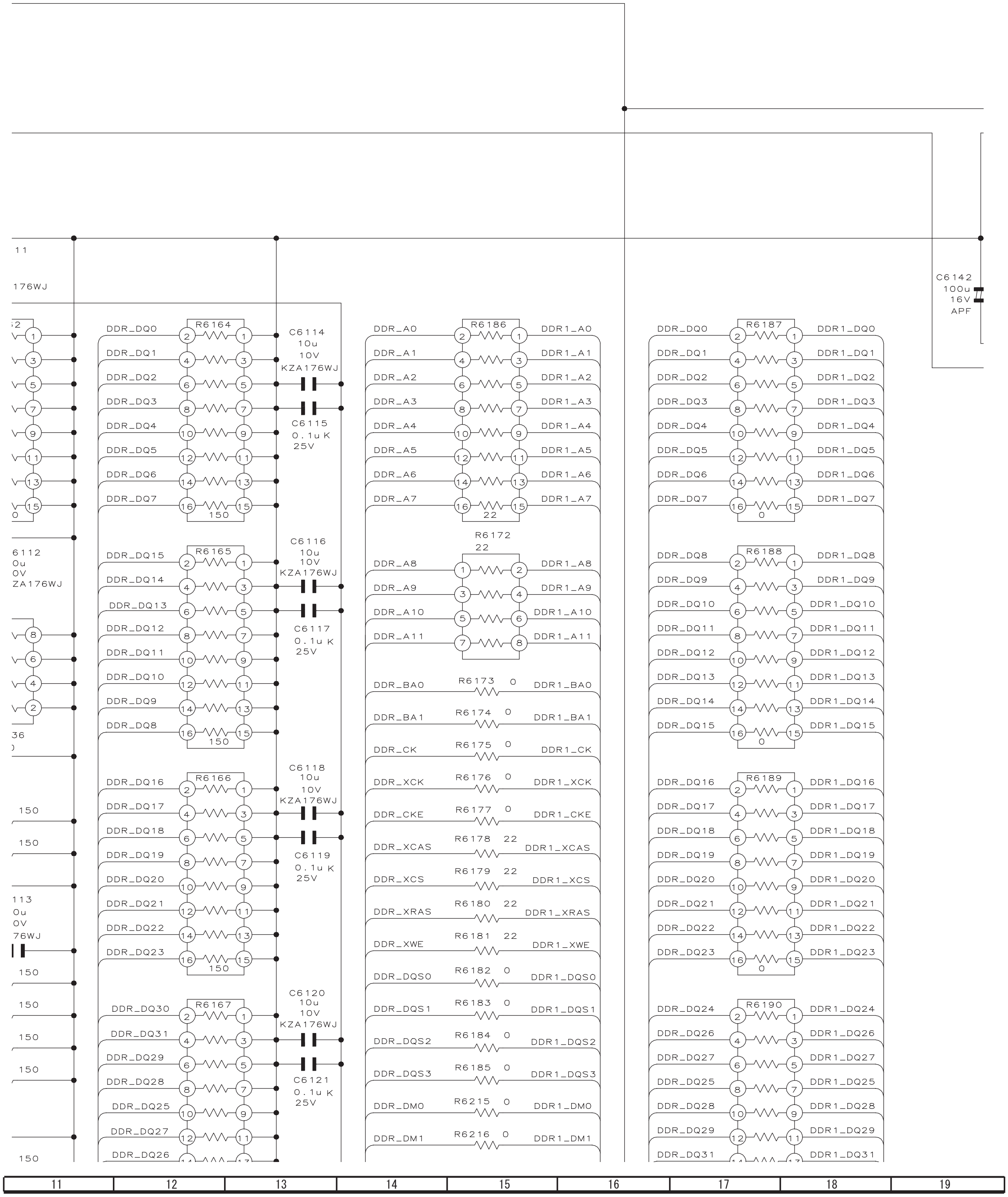
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10V
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C6115
0.1u K
25V
R6165
C6116
C6117
R6166
C6118
C6119
R6167
C6120
C6121
R6186
22
R6172
R6173 0
R6174 0
R6175 0
R6176 0
R6177 0
R6178 22
R6179 22
R6180 22
R6181 22
R6182 0
R6183 0
R6184 0
R6185 0
R6215 0
R6216 0
R6187
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R6190
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APF
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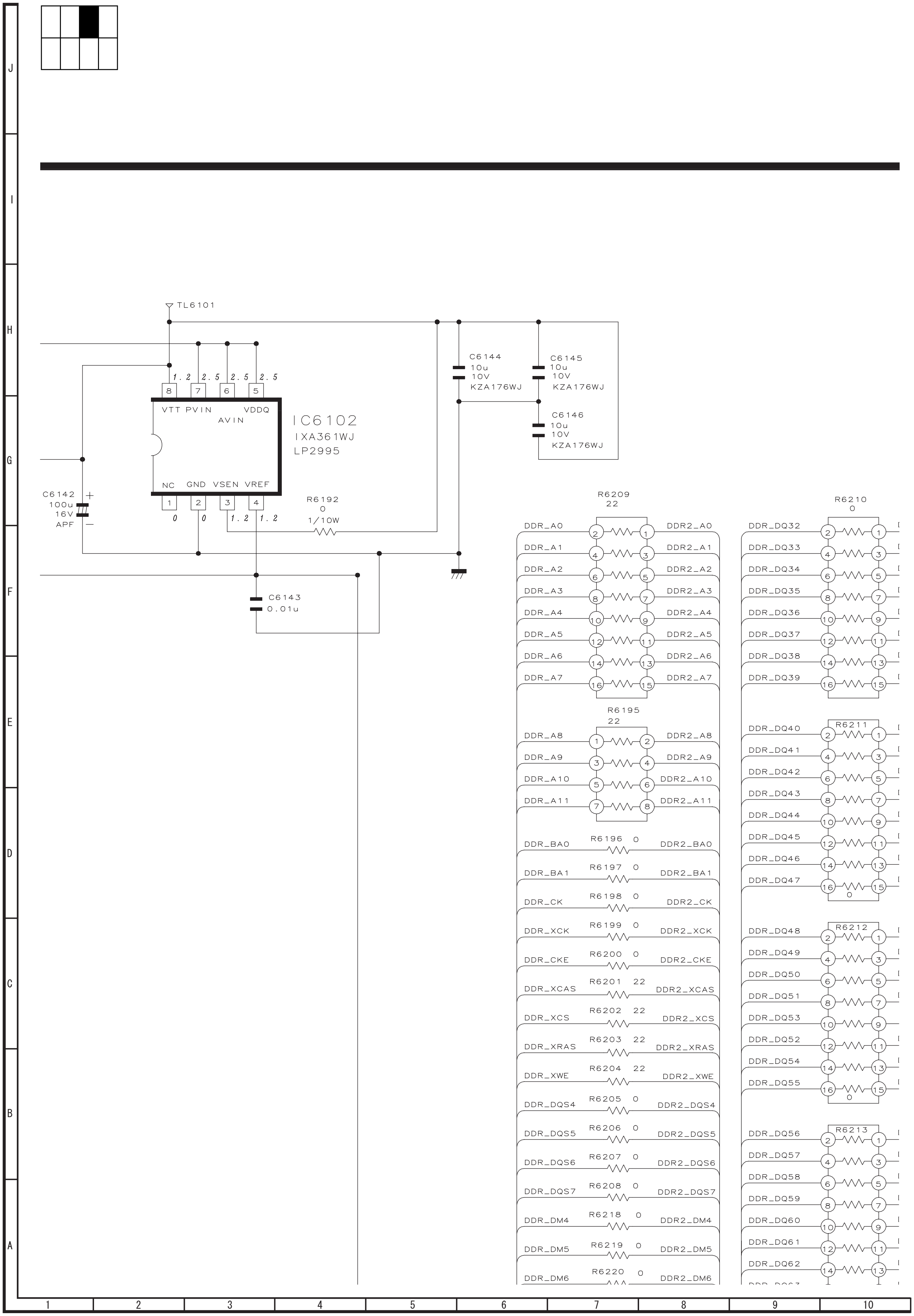
J
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10
TL6101
IC6102
IXA361WJ
LP2995
VTT PVIN VDDQ
AVIN
NC GND VSEN VREF
8 7 6 5
1.2 2.5 2.5 2.5
1 2 3 4
0 0 1.2 1.2
C6142
100u
16V
APF
C6143
0.01u
R6192
0
1/10W
C6144
10u
10V
KZA176WJ
C6145
10u
10V
KZA176WJ
C6146
10u
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KZA176WJ
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DDR_A0 DDR2_A0
DDR_A1 DDR2_A1
DDR_A2 DDR2_A2
DDR_A3 DDR2_A3
DDR_A4 DDR2_A4
DDR_A5 DDR2_A5
DDR_A6 DDR2_A6
DDR_A7 DDR2_A7
R6195
22
DDR_A8 DDR2_A8
DDR_A9 DDR2_A9
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R6197 0
DDR_BA1 DDR2_BA1
R6198 0
DDR_CK DDR2_CK
R6199 0
DDR_XCK DDR2_XCK
R6200 0
DDR_CKE DDR2_CKE
R6201 22
DDR_XCAS DDR2_XCAS
R6202 22
DDR_XCS DDR2_XCS
R6203 22
DDR_XRAS DDR2_XRAS
R6204 22
DDR_XWE DDR2_XWE
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DDR_DQS4 DDR2_DQS4
R6206 0
DDR_DQS5 DDR2_DQS5
R6207 0
DDR_DQS6 DDR2_DQS6
R6208 0
DDR_DQS7 DDR2_DQS7
R6218 0
DDR_DM4 DDR2_DM4
R6219 0
DDR_DM5 DDR2_DM5
R6220 0
DDR_DM6 DDR2_DM6
R6210
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DDR_DQ33
DDR_DQ34
DDR_DQ35
DDR_DQ36
DDR_DQ37
DDR_DQ38
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DDR_DQ44
DDR_DQ45
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DDR_DQ50
DDR_DQ51
DDR_DQ53
DDR_DQ52
DDR_DQ54
DDR_DQ55
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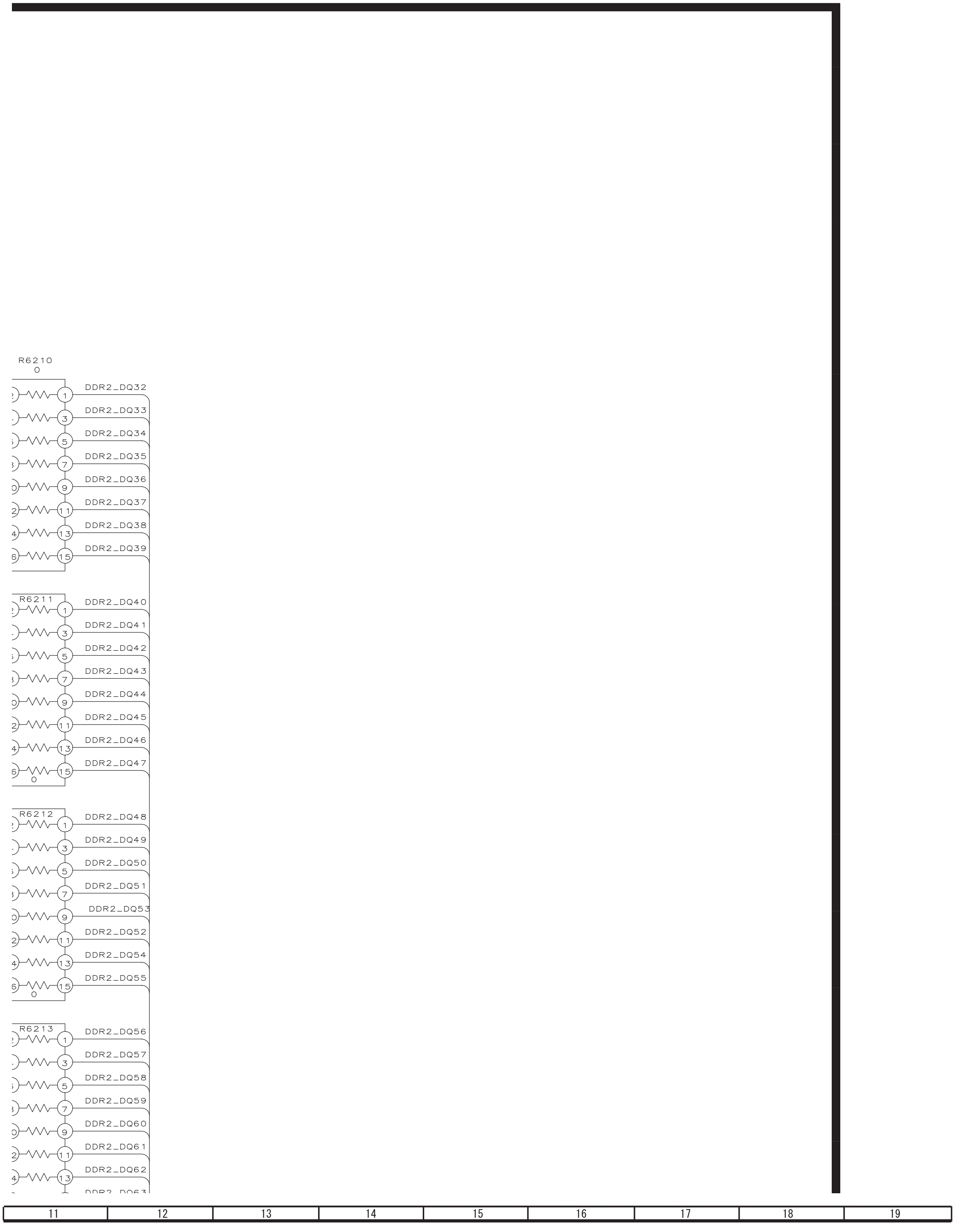
DDR_DQ62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DDR2_DQ55
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DDR2_DQ60
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DDR2_DQ62
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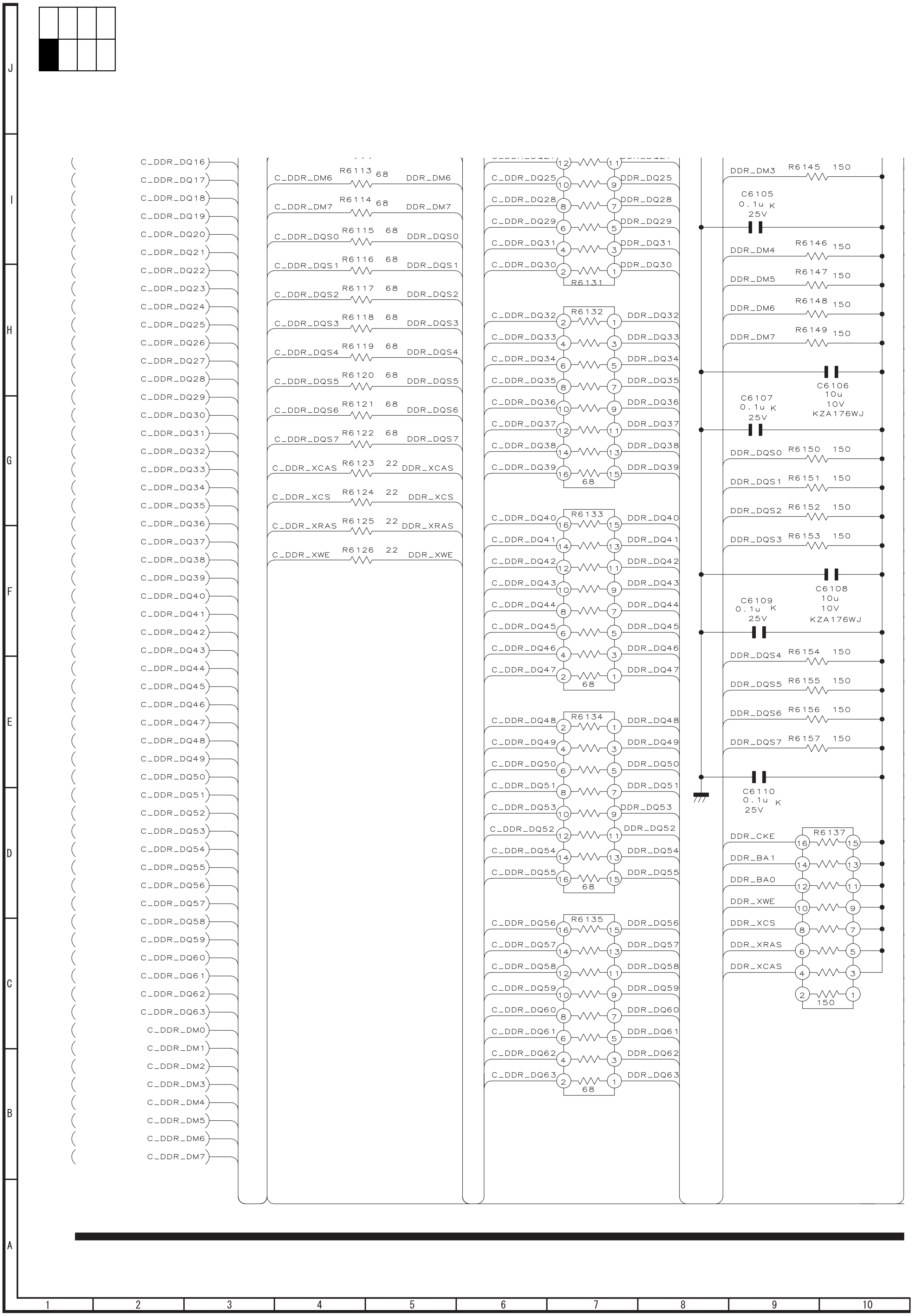
J
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9
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C_DDR_DQ17
C_DDR_DQ18
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C_DDR_DQ20
C_DDR_DQ21
C_DDR_DQ22
C_DDR_DQ23
C_DDR_DQ24
C_DDR_DQ25
C_DDR_DQ26
C_DDR_DQ27
C_DDR_DQ28
C_DDR_DQ29
C_DDR_DQ30
C_DDR_DQ31
C_DDR_DQ32
C_DDR_DQ33
C_DDR_DQ34
C_DDR_DQ35
C_DDR_DQ36
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C_DDR_DQ57
C_DDR_DQ58
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C_DDR_DQ60
C_DDR_DQ61
C_DDR_DQ62
C_DDR_DQ63
C_DDR_DM0
C_DDR_DM1
C_DDR_DM2
C_DDR_DM3
C_DDR_DM4
C_DDR_DM5
C_DDR_DM6
C_DDR_DM7
C_DDR_DM6 R6113 68 DDR_DM6
C_DDR_DM7 R6114 68 DDR_DM7
C_DDR_DQS0 R6115 68 DDR_DQS0
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C_DDR_DQS2 R6117 68 DDR_DQS2
C_DDR_DQS3 R6118 68 DDR_DQS3
C_DDR_DQS4 R6119 68 DDR_DQS4
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C_DDR_DQS6 R6121 68 DDR_DQS6
C_DDR_DQS7 R6122 68 DDR_DQS7
C_DDR_XCAS R6123 22 DDR_XCAS
C_DDR_XCS R6124 22 DDR_XCS
C_DDR_XRAS R6125 22 DDR_XRAS
C_DDR_XWE R6126 22 DDR_XWE
C_DDR_DQ25 10 9 DDR_DQ25
C_DDR_DQ28 8 7 DDR_DQ28
C_DDR_DQ29 6 5 DDR_DQ29
C_DDR_DQ31 4 3 DDR_DQ31
C_DDR_DQ30 2 1 DDR_DQ30
R6131
R6132
C_DDR_DQ32 2 1 DDR_DQ32
C_DDR_DQ33 4 3 DDR_DQ33
C_DDR_DQ34 6 5 DDR_DQ34
C_DDR_DQ35 8 7 DDR_DQ35
C_DDR_DQ36 10 9 DDR_DQ36
C_DDR_DQ37 12 11 DDR_DQ37
C_DDR_DQ38 14 13 DDR_DQ38
C_DDR_DQ39 16 15 DDR_DQ39
68
R6133
C_DDR_DQ40 16 15 DDR_DQ40
C_DDR_DQ41 14 13 DDR_DQ41
C_DDR_DQ42 12 11 DDR_DQ42
C_DDR_DQ43 10 9 DDR_DQ43
C_DDR_DQ44 8 7 DDR_DQ44
C_DDR_DQ45 6 5 DDR_DQ45
C_DDR_DQ46 4 3 DDR_DQ46
C_DDR_DQ47 2 1 DDR_DQ47
68
R6134
C_DDR_DQ48 2 1 DDR_DQ48
C_DDR_DQ49 4 3 DDR_DQ49
C_DDR_DQ50 6 5 DDR_DQ50
C_DDR_DQ51 8 7 DDR_DQ51
C_DDR_DQ53 10 9 DDR_DQ53
C_DDR_DQ52 12 11 DDR_DQ52
C_DDR_DQ54 14 13 DDR_DQ54
C_DDR_DQ55 16 15 DDR_DQ55
68
R6135
C_DDR_DQ56 16 15 DDR_DQ56
C_DDR_DQ57 14 13 DDR_DQ57
C_DDR_DQ58 12 11 DDR_DQ58
C_DDR_DQ59 10 9 DDR_DQ59
C_DDR_DQ60 8 7 DDR_DQ60
C_DDR_DQ61 6 5 DDR_DQ61
C_DDR_DQ62 4 3 DDR_DQ62
C_DDR_DQ63 2 1 DDR_DQ63
68
DDR_DM3 R6145 150
C6105 0.1u K 25V
DDR_DM4 R6146 150
DDR_DM5 R6147 150
DDR_DM6 R6148 150
DDR_DM7 R6149 150
C6106 10u 10V KZA176WJ
C6107 0.1u K 25V
DDR_DQS0 R6150 150
DDR_DQS1 R6151 150
DDR_DQS2 R6152 150
DDR_DQS3 R6153 150
C6108 10u 10V KZA176WJ
C6109 0.1u K 25V
DDR_DQS4 R6154 150
DDR_DQS5 R6155 150
DDR_DQS6 R6156 150
DDR_DQS7 R6157 150
C6110 0.1u K 25V
R6137
DDR_CKE 16 15
DDR_BA1 14 13
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DDR_XCS 8 7
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DDR_XCAS 4 3
2 1
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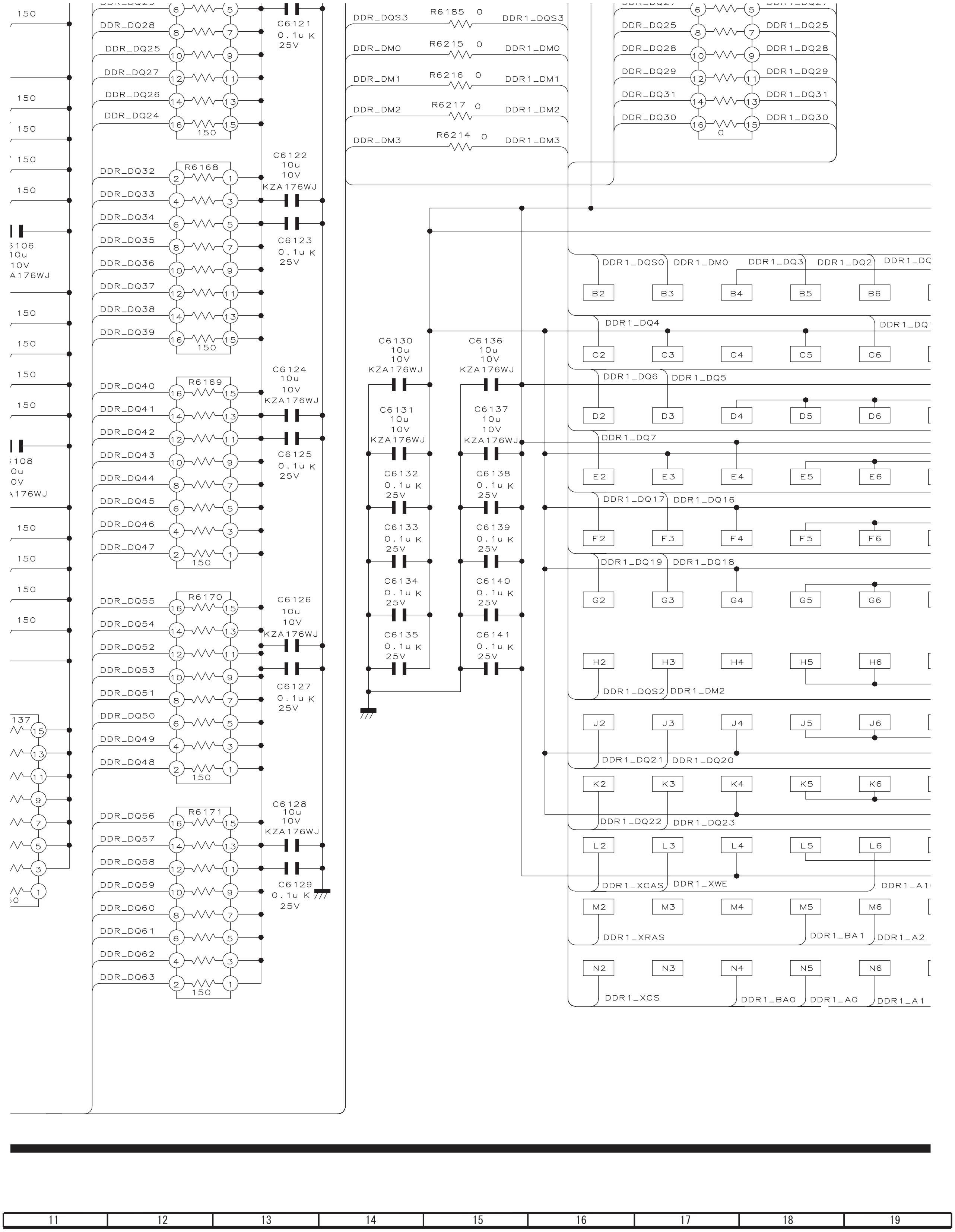
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25V
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10u
10V
KZA176WJ
R6168
DDR_DQ32
DDR_DQ33
DDR_DQ34
DDR_DQ35
DDR_DQ36
DDR_DQ37
DDR_DQ38
DDR_DQ39
C6123
0.1u K
25V
C6124
10u
10V
KZA176WJ
R6169
DDR_DQ40
DDR_DQ41
DDR_DQ42
DDR_DQ43
DDR_DQ44
DDR_DQ45
DDR_DQ46
DDR_DQ47
C6125
0.1u K
25V
C6126
10u
10V
KZA176WJ
R6170
DDR_DQ55
DDR_DQ54
DDR_DQ52
DDR_DQ53
DDR_DQ51
DDR_DQ50
DDR_DQ49
DDR_DQ48
C6127
0.1u K
25V
C6128
10u
10V
KZA176WJ
R6171
DDR_DQ56
DDR_DQ57
DDR_DQ58
DDR_DQ59
DDR_DQ60
DDR_DQ61
DDR_DQ62
DDR_DQ63
C6129
0.1u K
25V
150
DDR_DQS3
R6185 0
DDR1_DQS3
DDR_DM0
R6215 0
DDR1_DM0
DDR_DM1
R6216 0
DDR1_DM1
DDR_DM2
R6217 0
DDR1_DM2
DDR_DM3
R6214 0
DDR1_DM3
DDR_DQ25
DDR1_DQ25
DDR_DQ28
DDR1_DQ28
DDR_DQ29
DDR1_DQ29
DDR_DQ31
DDR1_DQ31
DDR_DQ30
DDR1_DQ30
C6130
10u
10V
KZA176WJ
C6131
10u
10V
KZA176WJ
C6132
0.1u K
25V
C6133
0.1u K
25V
C6134
0.1u K
25V
C6135
0.1u K
25V
C6136
10u
10V
KZA176WJ
C6137
10u
10V
KZA176WJ
C6138
0.1u K
25V
C6139
0.1u K
25V
C6140
0.1u K
25V
C6141
0.1u K
25V
DDR1_DQS0
DDR1_DM0
DDR1_DQ3
DDR1_DQ2
B2 B3 B4 B5 B6
DDR1_DQ4
C2 C3 C4 C5 C6
DDR1_DQ6
DDR1_DQ5
D2 D3 D4 D5 D6
DDR1_DQ7
E2 E3 E4 E5 E6
DDR1_DQ17
DDR1_DQ16
F2 F3 F4 F5 F6
DDR1_DQ19
DDR1_DQ18
G2 G3 G4 G5 G6
H2 H3 H4 H5 H6
DDR1_DQS2
DDR1_DM2
J2 J3 J4 J5 J6
DDR1_DQ21
DDR1_DQ20
K2 K3 K4 K5 K6
DDR1_DQ22
DDR1_DQ23
L2 L3 L4 L5 L6
DDR1_XCAS
DDR1_XWE
M2 M3 M4 M5 M6
DDR1_XRAS
DDR1_BA1
DDR1_A2
N2 N3 N4 N5 N6
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DDR1_A1
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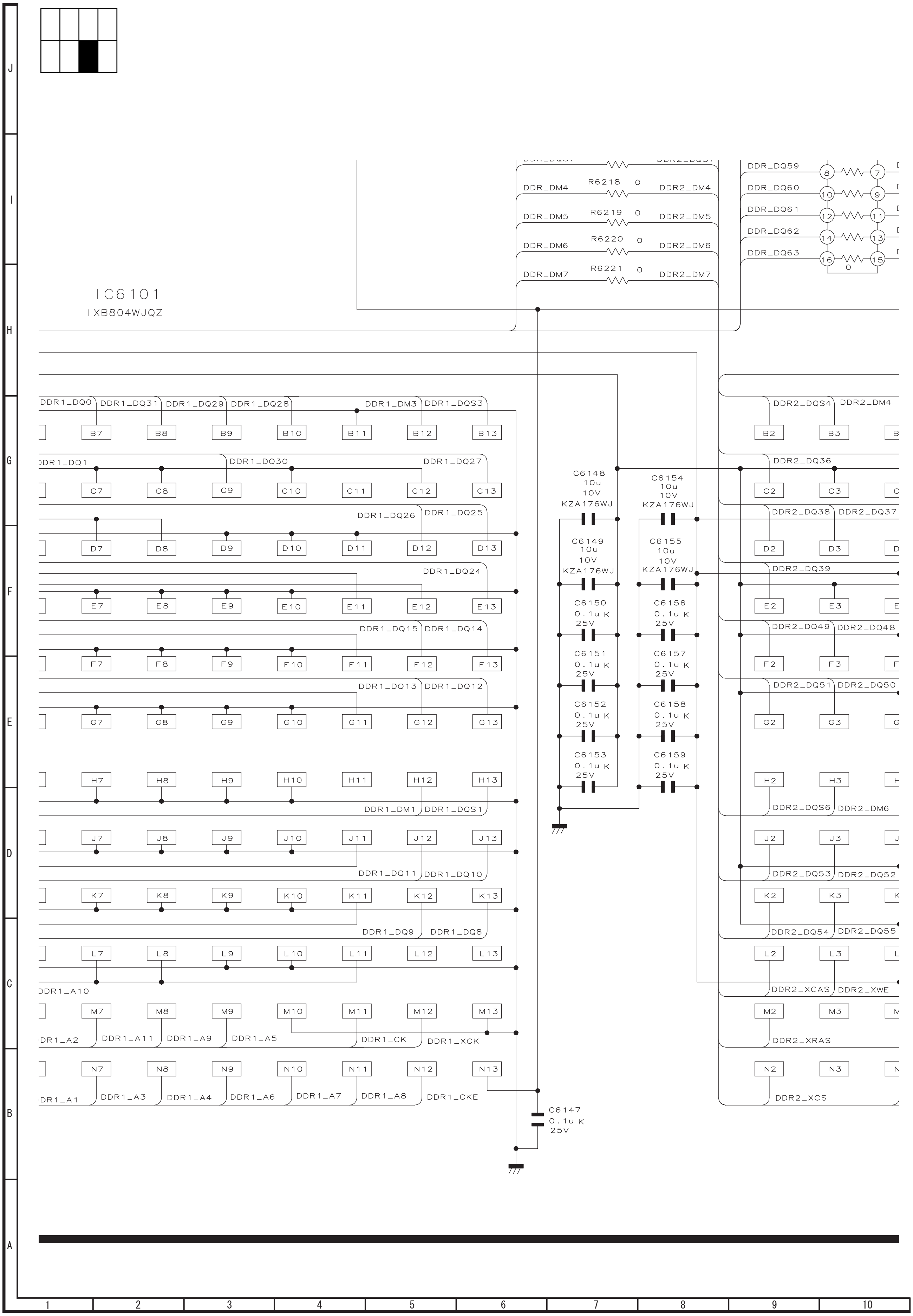
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R6218 0
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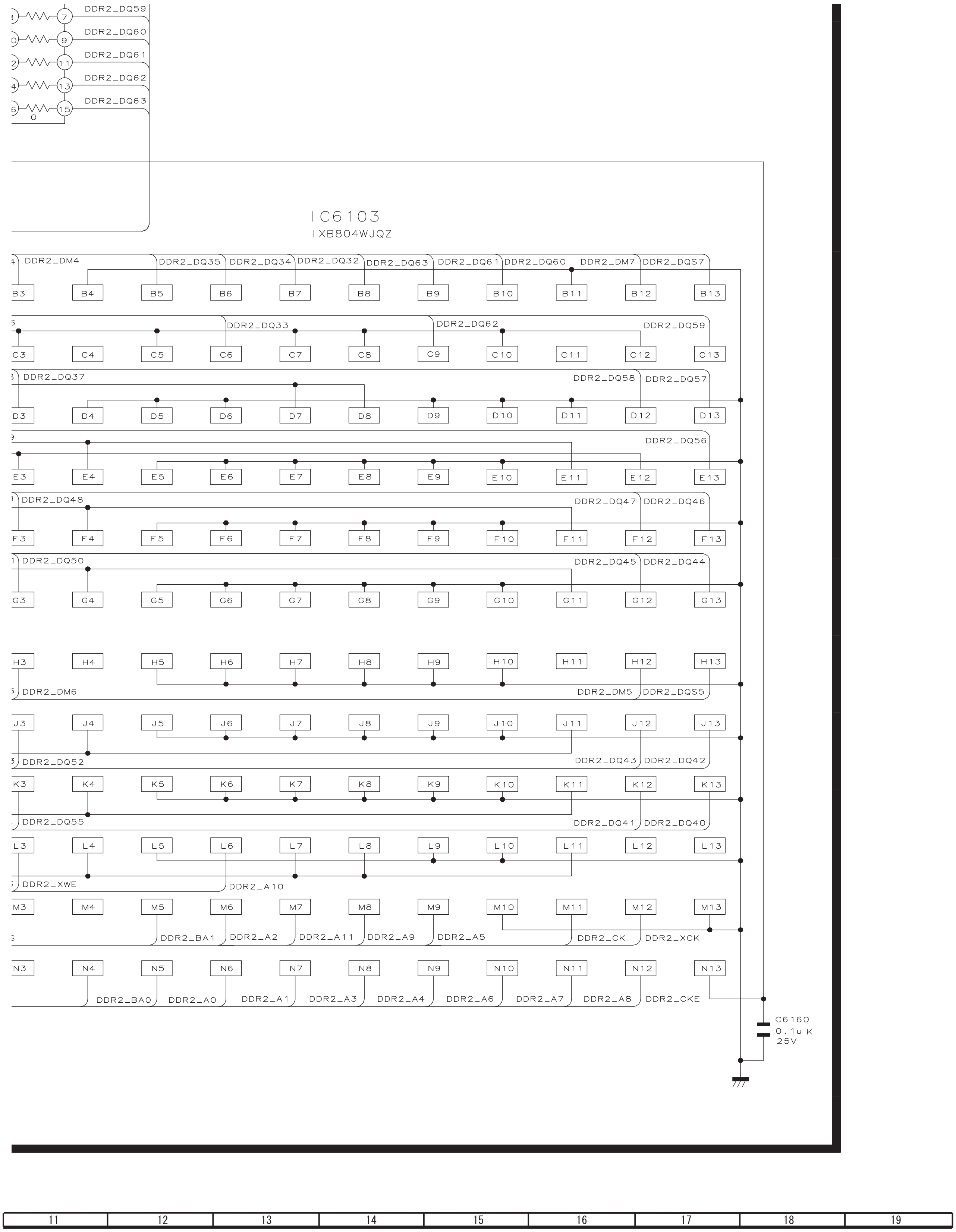
DDR_DM5
R6219 0
DDR2_DM5
DDR_DM6
R6220 0
DDR2_DM6
DDR_DM7
R6221 0
DDR2_DM7
DDR_DQ59
DDR_DQ60
DDR_DQ61
DDR_DQ62
DDR_DQ63
8 7 10 9 12 11 14 13 16 15
0
DDR1_DQ0
DDR1_DQ31
DDR1_DQ29
DDR1_DQ28
DDR1_DM3
DDR1_DQS3
B7 B8 B9 B10 B11 B12 B13
DDR1_DQ1
DDR1_DQ30
DDR1_DQ27
C7 C8 C9 C10 C11 C12 C13
DDR1_DQ26
DDR1_DQ25
D7 D8 D9 D10 D11 D12 D13
DDR1_DQ24
E7 E8 E9 E10 E11 E12 E13
DDR1_DQ15
DDR1_DQ14
F7 F8 F9 F10 F11 F12 F13
DDR1_DQ13
DDR1_DQ12
G7 G8 G9 G10 G11 G12 G13
H7 H8 H9 H10 H11 H12 H13
DDR1_DM1
DDR1_DQS1
J7 J8 J9 J10 J11 J12 J13
DDR1_DQ11
DDR1_DQ10
K7 K8 K9 K10 K11 K12 K13
DDR1_DQ9
DDR1_DQ8
L7 L8 L9 L10 L11 L12 L13
DDR1_A10
M7 M8 M9 M10 M11 M12 M13
DDR1_A2
DDR1_A11
DDR1_A9
DDR1_A5
DDR1_CK
DDR1_XCK
N7 N8 N9 N10 N11 N12 N13
DDR1_A1
DDR1_A3
DDR1_A4
DDR1_A6
DDR1_A7
DDR1_A8
DDR1_CKE
C6147
0.1u K
25V
C6148
10u
10V
KZA176WJ
C6149
10u
10V
KZA176WJ
C6150
0.1u K
25V
C6151
0.1u K
25V
C6152
0.1u K
25V
C6153
0.1u K
25V
C6154
10u
10V
KZA176WJ
C6155
10u
10V
KZA176WJ
C6156
0.1u K
25V
C6157
0.1u K
25V
C6158
0.1u K
25V
C6159
0.1u K
25V
DDR2_DQS4
DDR2_DM4
B2 B3
DDR2_DQ36
C2 C3
DDR2_DQ38
DDR2_DQ37
D2 D3
DDR2_DQ39
E2 E3
DDR2_DQ49
DDR2_DQ48
F2 F3
DDR2_DQ51
DDR2_DQ50
G2 G3
H2 H3
DDR2_DQS6
DDR2_DM6
J2 J3
DDR2_DQ53
DDR2_DQ52
K2 K3
DDR2_DQ54
DDR2_DQ55
L2 L3
DDR2_XCAS
DDR2_XWE
M2 M3
DDR2_XRAS
N2 N3
DDR2_XCS
J I H G F E D C B A
1 2 3 4 5 6 7 8 9 10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9
11
13
15
0
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IXB804WJQZ
DDR2_DM4
DDR2_DQ35
DDR2_DQ34
DDR2_DQ32
DDR2_DQ63
DDR2_DQ61
DDR2_DQ60
DDR2_DM7
DDR2_DQS7
B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13
DDR2_DQ33
DDR2_DQ62
DDR2_DQ59
C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13
DDR2_DQ37
DDR2_DQ58
DDR2_DQ57
D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13
DDR2_DQ56
E3 E4 E5 E6 E7 E8 E9 E10 E11 E12 E13
DDR2_DQ48
DDR2_DQ47
DDR2_DQ46
F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13
DDR2_DQ50
DDR2_DQ45
DDR2_DQ44
G3 G4 G5 G6 G7 G8 G9 G10 G11 G12 G13
H3 H4 H5 H6 H7 H8 H9 H10 H11 H12 H13
DDR2_DM6
DDR2_DM5
DDR2_DQS5
J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13
DDR2_DQ52
DDR2_DQ43
DDR2_DQ42
K3 K4 K5 K6 K7 K8 K9 K10 K11 K12 K13
DDR2_DQ55
DDR2_DQ41
DDR2_DQ40
L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13
DDR2_XWE
DDR2_A10
M3 M4 M5 M6 M7 M8 M9 M10 M11 M12 M13
DDR2_BA1
DDR2_A2
DDR2_A11
DDR2_A9
DDR2_A5
DDR2_CK
DDR2_XCK
N3 N4 N5 N6 N7 N8 N9 N10 N11 N12 N13
DDR2_BA0
DDR2_A0
DDR2_A1
DDR2_A3
DDR2_A4
DDR2_A6
DDR2_A7
DDR2_A8
DDR2_CKE
C6160
0.1u K
25V
11
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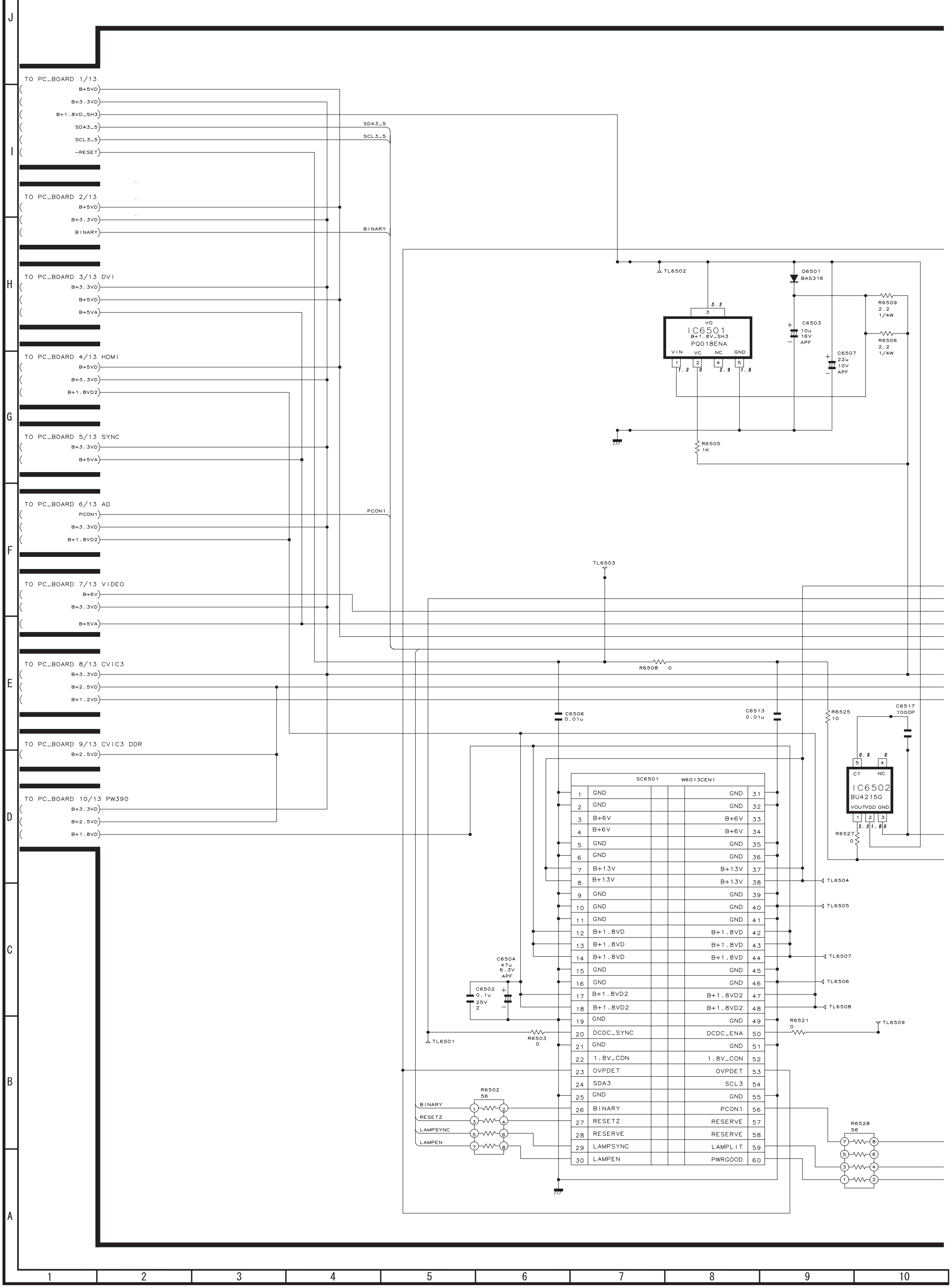
19

■PC I/F Unit-12


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
TO PC_BOARD 1/13
B+5VD
B+3.3VD
B+1.8VD_SH3
SDA3_5
SCL3_5
-RESET
TO PC_BOARD 2/13
B+5VD
B+3.3VD
BINARY
TO PC_BOARD 3/13 DVI
B+3.3VD
B+5VD
B+5VA
TO PC_BOARD 4/13 HDMI
B+5VD
B+3.3VD
B+1.8VD2
TO PC_BOARD 5/13 SYNC
B+3.3VD
B+5VA
TO PC_BOARD 6/13 AD
PCON1
B+3.3VD
B+1.8VD2
TO PC_BOARD 7/13 VIDEO
B+6V
B+3.3VD
B+5VA
TO PC_BOARD 8/13 CVIC3
B+3.3VD
B+2.5VD
B+1.2VD
TO PC_BOARD 9/13 CVIC3 DDR
B+2.5VD
TO PC_BOARD 10/13 PW390
B+3.3VD
B+2.5VD
B+1.8VD
SDA3_5
SCL3_5
BINARY
PCON1
TL6502
D6501
BAS316
3.3
3
VO
IC6501
B+1.8V_SH3
PQ018ENA
VIN
VC
NC
GND
1
2
4
5
1.2
0
2.9
1.8
C6503
10u
16V
APF
C6507
22u
10V
APF
R6509
2.2
1/4W
R6506
2.2
1/4W
R6505
1K
TL6503
R6508 0
C6506
0.01u
C6513
0.01u
R6525
10
C6517
1000P
0.9
0
5
4
CT
NC
IC6502
BU4215G
VOUT VDD GND
1
2
3
3.3
1.8
0
R6527
0
SC6501
W6013CEN1
1 GND
2 GND
3 B+6V
4 B+6V
5 GND
6 GND
7 B+13V
8 B+13V
9 GND
10 GND
11 GND
12 B+1.8VD
13 B+1.8VD
14 B+1.8VD
15 GND
16 GND
17 B+1.8VD2
18 B+1.8VD2
19 GND
20 DCDC_SYNC
21 GND
22 1.8V_CON
23 OVPDET
24 SDA3
25 GND
26 BINARY
27 RESETZ
28 RESERVE
29 LAMPSYNC
30 LAMPEN
GND 31
GND 32
B+6V 33
B+6V 34
GND 35
GND 36
B+13V 37
B+13V 38
GND 39
GND 40
GND 41
B+1.8VD 42
B+1.8VD 43
B+1.8VD 44
GND 45
GND 46
B+1.8VD2 47
B+1.8VD2 48
GND 49
DCDC_ENA 50
GND 51
1.8V_CON 52
OVPDET 53
SCL3 54
GND 55
PCON1 56
RESERVE 57
RESERVE 58
LAMPLIT 59
PWRGOOD 60
TL6504
TL6505
TL6507
TL6506
TL6508
R6521
0
TL6509
C6504
47u
6.3V
APF
C6502
0.1u
25V
Z
R6503
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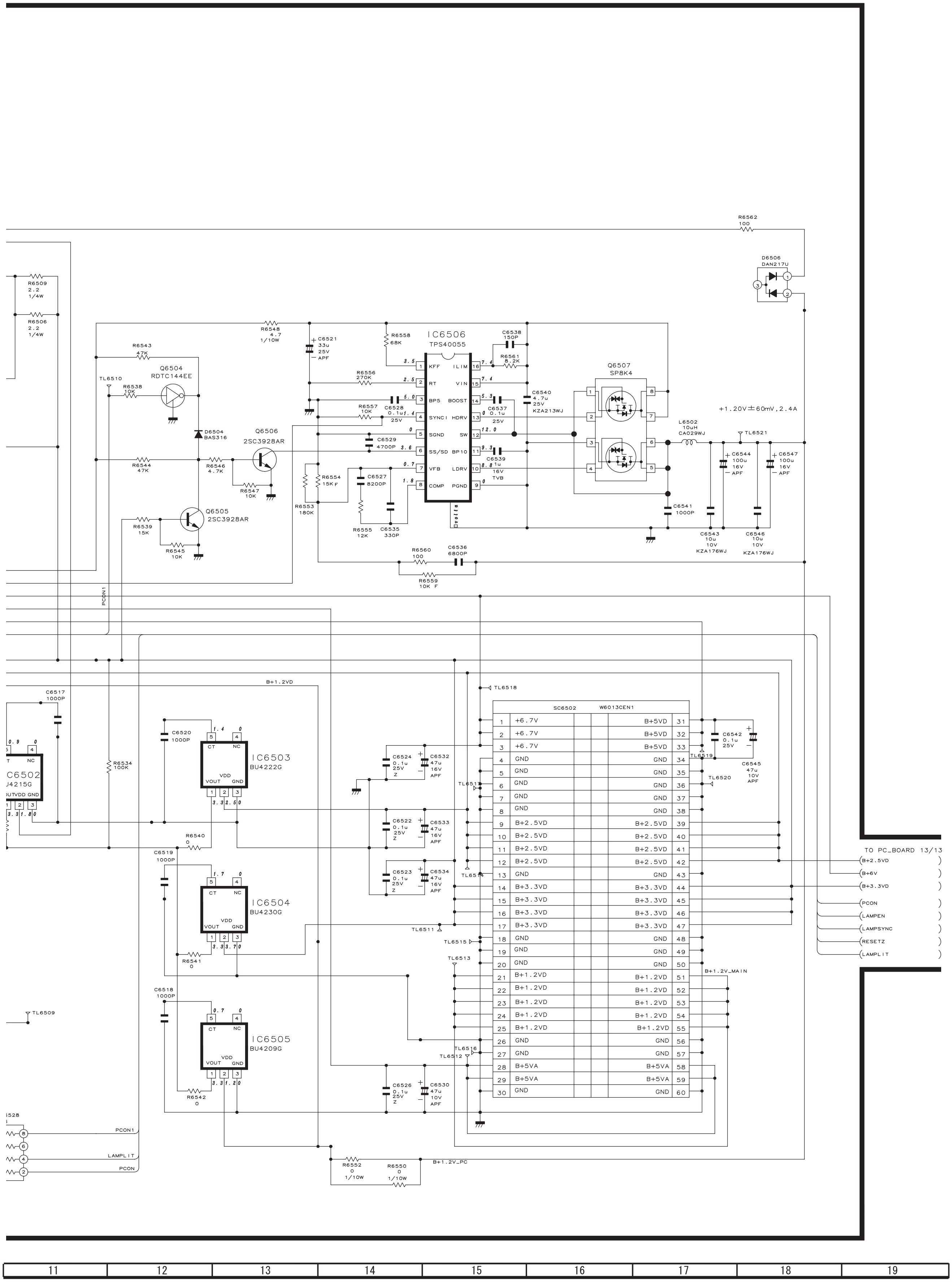
TL6501
R6502
56
BINARY
RESETZ
LAMPSYNC
LAMPEN
R6528
56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D6506 DAN217U
R6509 2.2 1/4W
R6506 2.2 1/4W
R6548 4.7 1/10W
C6521 33u 25V APF
R6558 68K
IC6506 TPS40055
C6538 150P
R6561 8.2K
R6543 47K
Q6504 RDTC144EE
TL6510
R6538 10K
R6556 270K
KFF RT BP5 SYNC1 SGND SS/SD VFB COMP
ILIM VIN BOOST HDRV SW BP10 LDRV PGND
C6540 4.7u 25V KZA213WJ
Q6507 SP8K4
R6557 10K
C6528 0.1u 25V
C6537 0.1u 25V
+1.20V±60mV,2.4A
D6504 BAS316
Q6506 2SC3928AR
C6529 4700P
L6502 10uH CA029WJ
TL6521
C6539 1u 16V TVB
C6544 100u 16V APF
C6547 100u 16V APF
R6544 47K
R6546 4.7K
R6547 10K
R6554 15K F
C6527 8200P
R6553 180K
R6555 12K
C6535 330P
C6541 1000P
C6543 10u 10V KZA176WJ
C6546 10u 10V KZA176WJ
Q6505 2SC3928AR
R6539 15K
R6545 10K
R6560 100
C6536 6800P
R6559 10K F
PCON1
B+1.2VD
TL6518
C6517 1000P
C6520 1000P
IC6503 BU4222G
C6502 U4215G
R6534 100K
SC6502 W6013CEN1
+6.7V B+5VD GND B+2.5VD B+3.3VD B+1.2VD B+5VA
C6524 0.1u 25V Z
C6532 47u 16V APF
C6542 0.1u 25V
C6545 47u 10V APF
TL6519
TL6520
TL6517
C6522 0.1u 25V Z
C6533 47u 16V APF
R6540 0
C6519 1000P
C6523 0.1u 25V Z
C6534 47u 16V APF
TL6514
IC6504 BU4230G
TL6511
TL6515
R6541 0
TL6513
B+1.2V_MAIN
TO PC_BOARD 13/13
B+2.5VD
B+6V
B+3.3VD
PCON
LAMPEN
LAMPSYNC
RESETZ
LAMPLIT
C6518 1000P
TL6509
IC6505 BU4209G
TL6516
TL6512
C6526 0.1u 25V Z
C6530 47u 10V APF
R6542 0
PCON1
LAMPLIT
PCON
R6552 0 1/10W
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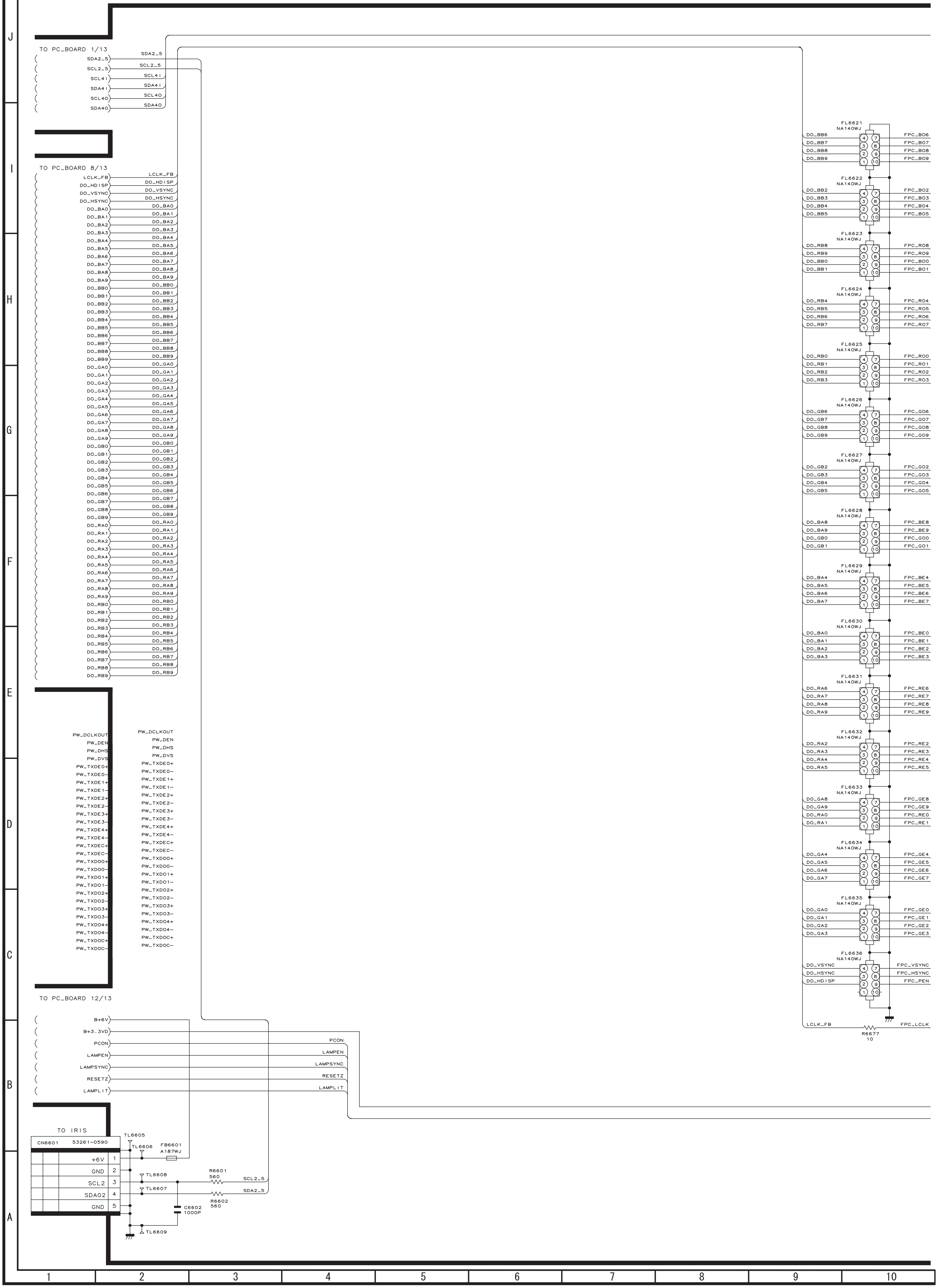
■PC I/F Unit-13


J
I
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D
C
B
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8
9
10
TO PC_BOARD 1/13
SDA2_5
SCL2_5
SCL4I
SDA4I
SCL4O
SDA4O
TO PC_BOARD 8/13
LCLK_FB
DO_HDISP
DO_VSYNC
DO_HSYNC
DO_BA0 … DO_BA9
DO_BB0 … DO_BB9
DO_GA0 … DO_GA9
DO_GB0 … DO_GB9
DO_RA0 … DO_RA9
DO_RB0 … DO_RB9
PW_DCLKOUT
PW_DEN
PW_DHS
PW_DVS
PW_TXDE0+
PW_TXDE0−
PW_TXDE1+
PW_TXDE1−
PW_TXDE2+
PW_TXDE2−
PW_TXDE3+
PW_TXDE3−
PW_TXDE4+
PW_TXDE4−
PW_TXDEC+
PW_TXDEC−
PW_TXDO0+
PW_TXDO0−
PW_TXDO1+
PW_TXDO1−
PW_TXDO2+
PW_TXDO2−
PW_TXDO3+
PW_TXDO3−
PW_TXDO4+
PW_TXDO4−
PW_TXDOC+
PW_TXDOC−
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B+6V
B+3.3VD
PCON
LAMPEN
LAMPSYNC
RESETZ
LAMPLIT
TO IRIS
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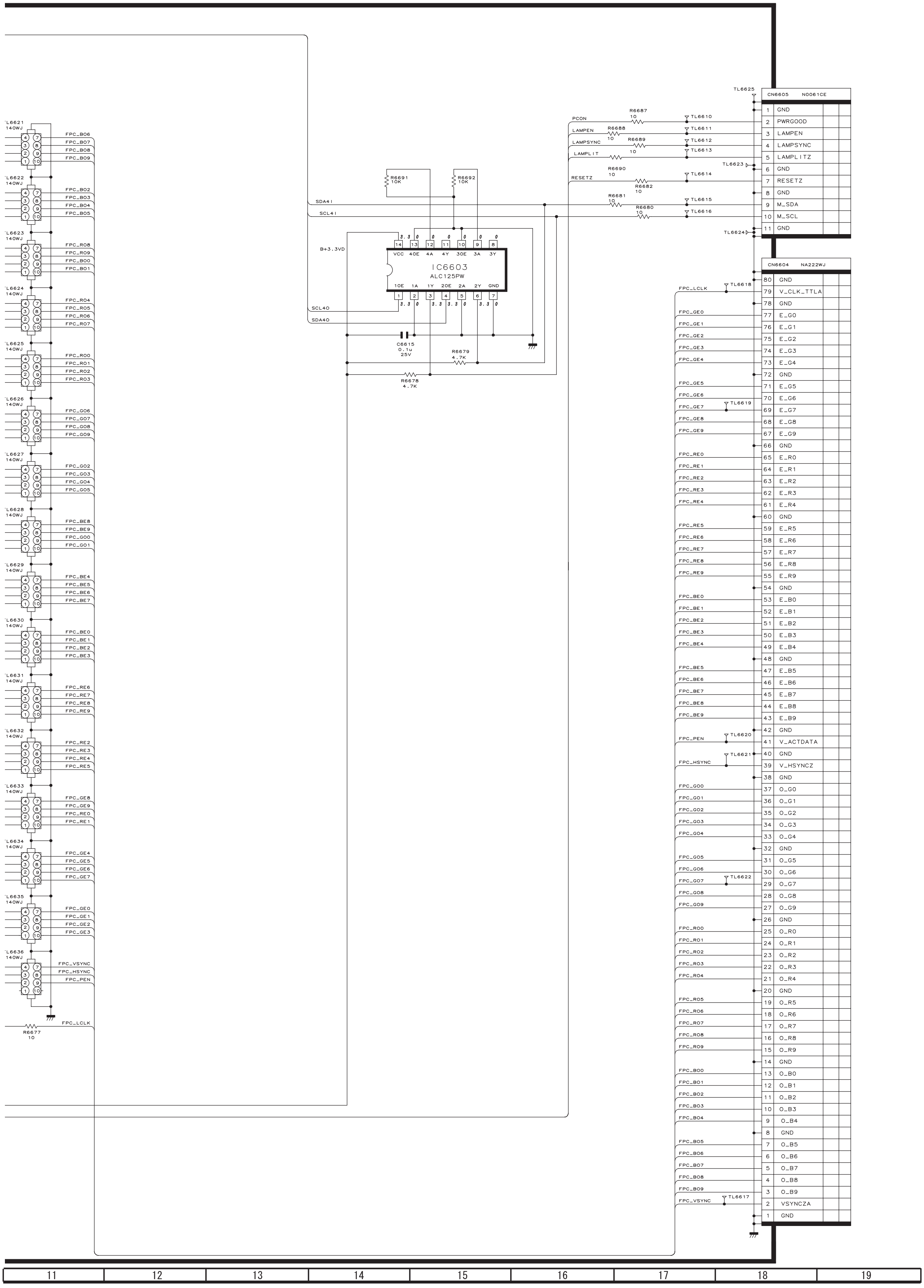
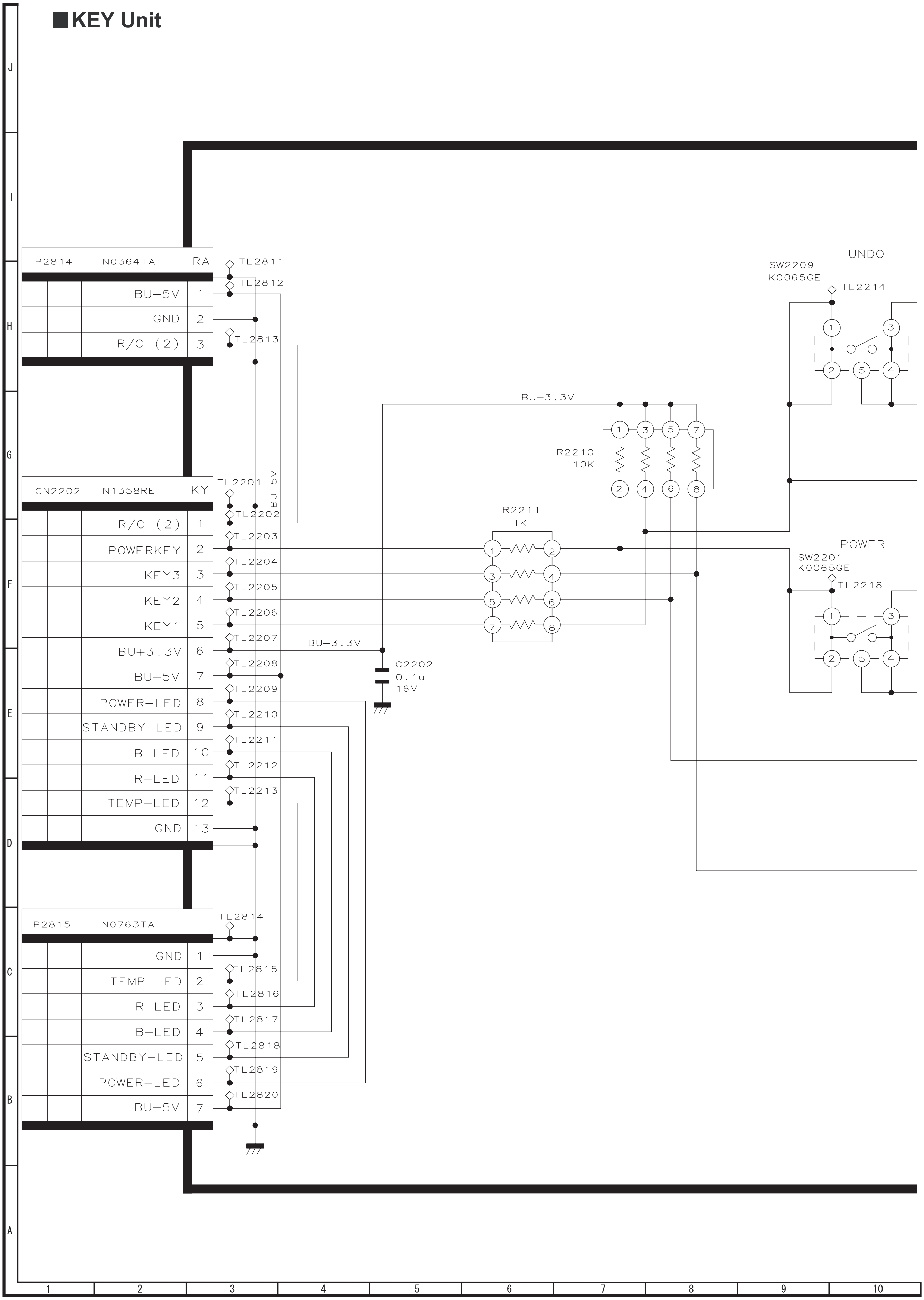
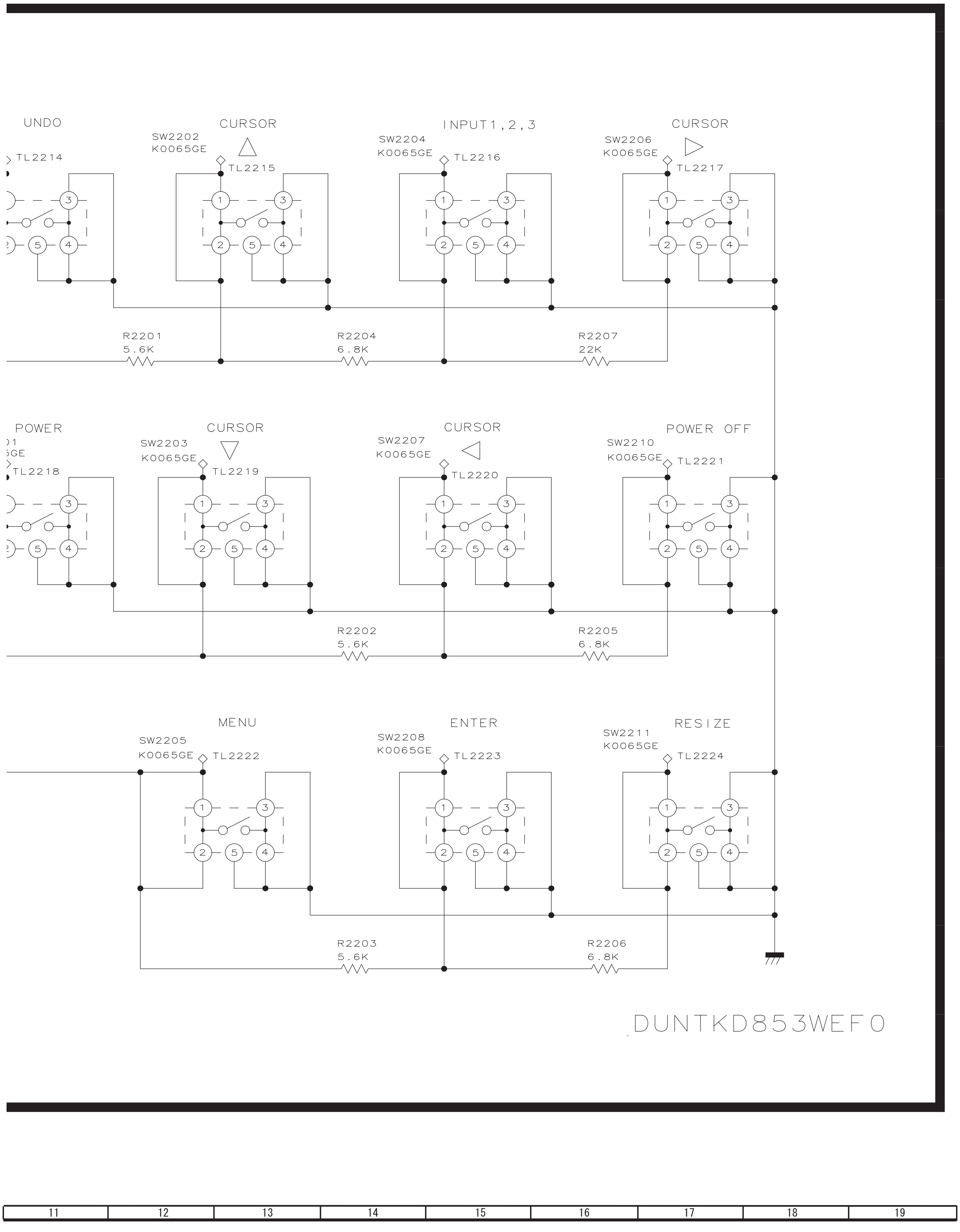
GND 2
SCL2 3
SDA02 4
GND 5
TL6605
TL6606
FB6601 A187WJ
TL6608
TL6607
TL6609
R6601 560
R6602 560
C6602 1000P
SCL2_5
SDA2_5
FL6621 NA140WJ DO_BB6 DO_BB7 DO_BB8 DO_BB9 FPC_BO6 FPC_BO7 FPC_BO8 FPC_BO9
FL6622 NA140WJ DO_BB2 DO_BB3 DO_BB4 DO_BB5 FPC_BO2 FPC_BO3 FPC_BO4 FPC_BO5
FL6623 NA140WJ DO_RB8 DO_RB9 DO_BB0 DO_BB1 FPC_RO8 FPC_RO9 FPC_BO0 FPC_BO1
FL6624 NA140WJ DO_RB4 DO_RB5 DO_RB6 DO_RB7 FPC_RO4 FPC_RO5 FPC_RO6 FPC_RO7
FL6625 NA140WJ DO_RB0 DO_RB1 DO_RB2 DO_RB3 FPC_RO0 FPC_RO1 FPC_RO2 FPC_RO3
FL6626 NA140WJ DO_GB6 DO_GB7 DO_GB8 DO_GB9 FPC_GO6 FPC_GO7 FPC_GO8 FPC_GO9
FL6627 NA140WJ DO_GB2 DO_GB3 DO_GB4 DO_GB5 FPC_GO2 FPC_GO3 FPC_GO4 FPC_GO5
FL6628 NA140WJ DO_BA8 DO_BA9 DO_GB0 DO_GB1 FPC_BE8 FPC_BE9 FPC_GO0 FPC_GO1
FL6629 NA140WJ DO_BA4 DO_BA5 DO_BA6 DO_BA7 FPC_BE4 FPC_BE5 FPC_BE6 FPC_BE7
FL6630 NA140WJ DO_BA0 DO_BA1 DO_BA2 DO_BA3 FPC_BE0 FPC_BE1 FPC_BE2 FPC_BE3
FL6631 NA140WJ DO_RA6 DO_RA7 DO_RA8 DO_RA9 FPC_RE6 FPC_RE7 FPC_RE8 FPC_RE9
FL6632 NA140WJ DO_RA2 DO_RA3 DO_RA4 DO_RA5 FPC_RE2 FPC_RE3 FPC_RE4 FPC_RE5
FL6633 NA140WJ DO_GA8 DO_GA9 DO_RA0 DO_RA1 FPC_GE8 FPC_GE9 FPC_RE0 FPC_RE1
FL6634 NA140WJ DO_GA4 DO_GA5 DO_GA6 DO_GA7 FPC_GE4 FPC_GE5 FPC_GE6 FPC_GE7
FL6635 NA140WJ DO_GA0 DO_GA1 DO_GA2 DO_GA3 FPC_GE0 FPC_GE1 FPC_GE2 FPC_GE3
FL6636 NA140WJ DO_VSYNC DO_HSYNC DO_HDISP FPC_VSYNC FPC_HSYNC FPC_PEN
LCLK_FB
R6677 10
FPC_LCLK

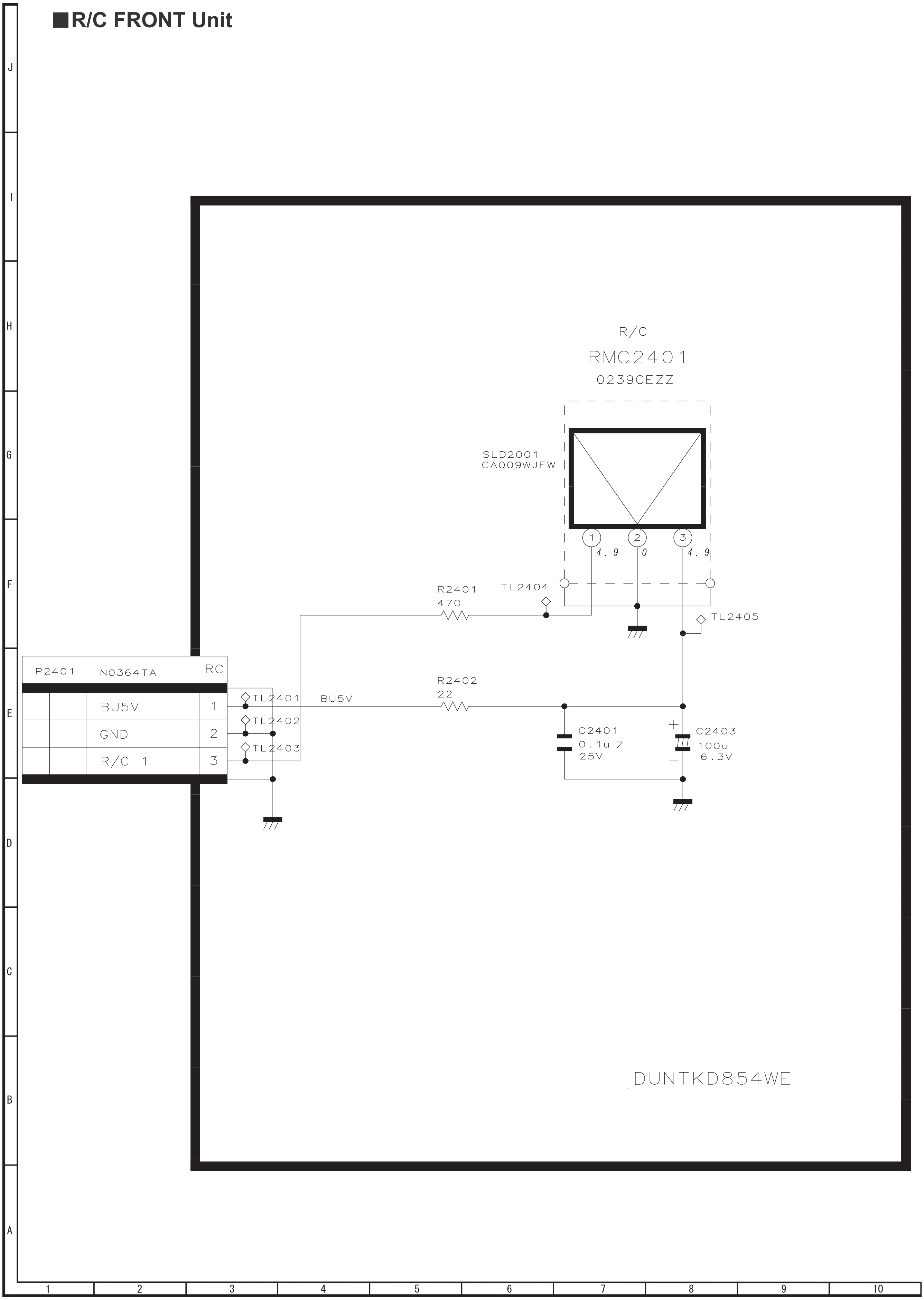

IC6603
ALC125PW
VCC 4OE 4A 4Y 3OE 3A 3Y
1OE 1A 1Y 2OE 2A 2Y GND
B+3.3VD
SDA4I
SCL4I
SCL4O
SDA4O
R6691 10K
R6692 10K
C6615 0.1u 25V
R6679 4.7K
R6678 4.7K
R6687 10
R6688 10
R6689 10
R6690 10
R6682 10
R6681 10
R6680 10
R6677 10
PCON
LAMPEN
LAMPSYNC
LAMPLIT
RESETZ
TL6610
TL6611
TL6612
TL6613
TL6614
TL6615
TL6616
TL6623
TL6624
TL6625
CN6605 N0061CE
1 GND
2 PWRGOOD
3 LAMPEN
4 LAMPSYNC
5 LAMPLITZ
6 GND
7 RESETZ
8 GND
9 M_SDA
10 M_SCL
11 GND
CN6604 NA222WJ
80 GND
79 V_CLK_TTLA
78 GND
77 E_G0
76 E_G1
75 E_G2
74 E_G3
73 E_G4
72 GND
71 E_G5
70 E_G6
69 E_G7
68 E_G8
67 E_G9
66 GND
65 E_R0
64 E_R1
63 E_R2
62 E_R3
61 E_R4
60 GND
59 E_R5
58 E_R6
57 E_R7
56 E_R8
55 E_R9
54 GND
53 E_B0
52 E_B1
51 E_B2
50 E_B3
49 E_B4
48 GND
47 E_B5
46 E_B6
45 E_B7
44 E_B8
43 E_B9
42 GND
41 V_ACTDATA
40 GND
39 V_HSYNCZ
38 GND
37 O_G0
36 O_G1
35 O_G2
34 O_G3
33 O_G4
32 GND
31 O_G5
30 O_G6
29 O_G7
28 O_G8
27 O_G9
26 GND
25 O_R0
24 O_R1
23 O_R2
22 O_R3
21 O_R4
20 GND
19 O_R5
18 O_R6
17 O_R7
16 O_R8
15 O_R9
14 GND
13 O_B0
12 O_B1
11 O_B2
10 O_B3
9 O_B4
8 GND
7 O_B5
6 O_B6
5 O_B7
4 O_B8
3 O_B9
2 VSYNCZA
1 GND
TL6617
TL6618
TL6619
TL6620
TL6621
TL6622
FPC_LCLK
FPC_PEN
FPC_HSYNC
FPC_VSYNC
TL6621 140WJ
TL6622 140WJ
TL6623 140WJ
TL6624 140WJ
TL6625 140WJ
TL6626 140WJ
TL6627 140WJ
TL6628 140WJ
TL6629 140WJ
TL6630 140WJ
TL6631 140WJ
TL6632 140WJ
TL6633 140WJ
TL6634 140WJ
TL6635 140WJ
TL6636 140WJ
11
12
13
14
15
16
17
18
19

■KEY Unit

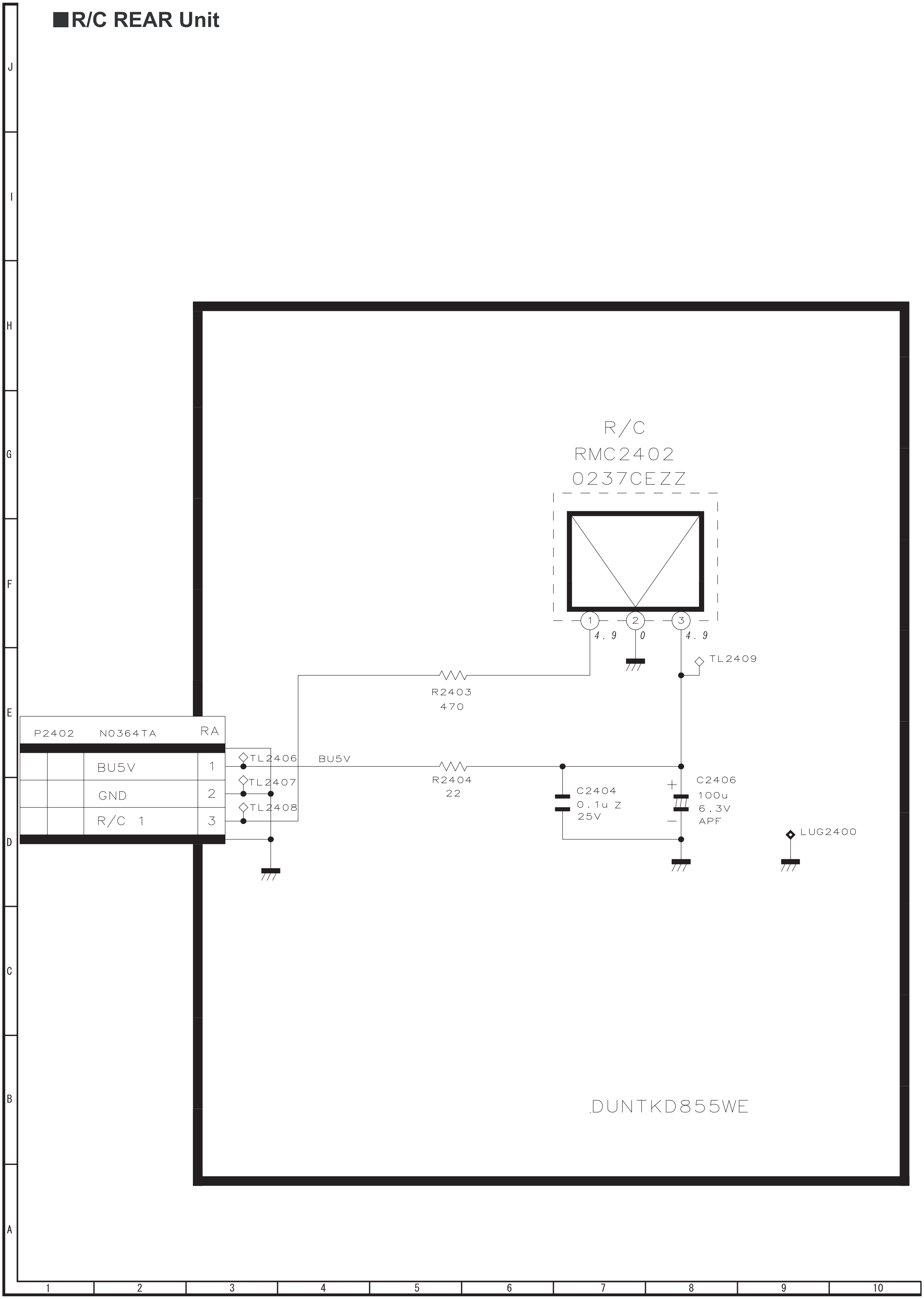

J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P2814 N0364TA RA
BU+5V 1
GND 2
R/C (2) 3
TL2811
TL2812
TL2813
CN2202 N1358RE KY
R/C (2) 1
POWERKEY 2
KEY3 3
KEY2 4
KEY1 5
BU+3.3V 6
BU+5V 7
POWER-LED 8
STANDBY-LED 9
B-LED 10
R-LED 11
TEMP-LED 12
GND 13
TL2201
TL2202
TL2203
TL2204
TL2205
TL2206
TL2207
TL2208
TL2209
TL2210
TL2211
TL2212
TL2213
BU+5V
BU+3.3V
C2202
0.1u
16V
R2211
1K
R2210
10K
BU+3.3V
SW2209
K0065GE
UNDO
TL2214
SW2201
K0065GE
POWER
TL2218
P2815 N0763TA
GND 1
TEMP-LED 2
R-LED 3
B-LED 4
STANDBY-LED 5
POWER-LED 6
BU+5V 7
TL2814
TL2815
TL2816
TL2817
TL2818
TL2819
TL2820


UNDO
TL2214
SW2202
K0065GE
CURSOR
△
TL2215
SW2204
K0065GE
INPUT1,2,3
TL2216
SW2206
K0065GE
CURSOR
▷
TL2217
R2201
5.6K
R2204
6.8K
R2207
22K
POWER
TL2218
SW2203
K0065GE
CURSOR
▽
TL2219
SW2207
K0065GE
CURSOR
◁
TL2220
SW2210
K0065GE
POWER OFF
TL2221
R2202
5.6K
R2205
6.8K
SW2205
K0065GE
MENU
TL2222
SW2208
K0065GE
ENTER
TL2223
SW2211
K0065GE
RESIZE
TL2224
R2203
5.6K
R2206
6.8K
1
2
3
4
5
DUNTKD853WEF0
11
12
13
14
15
16
17
18
19

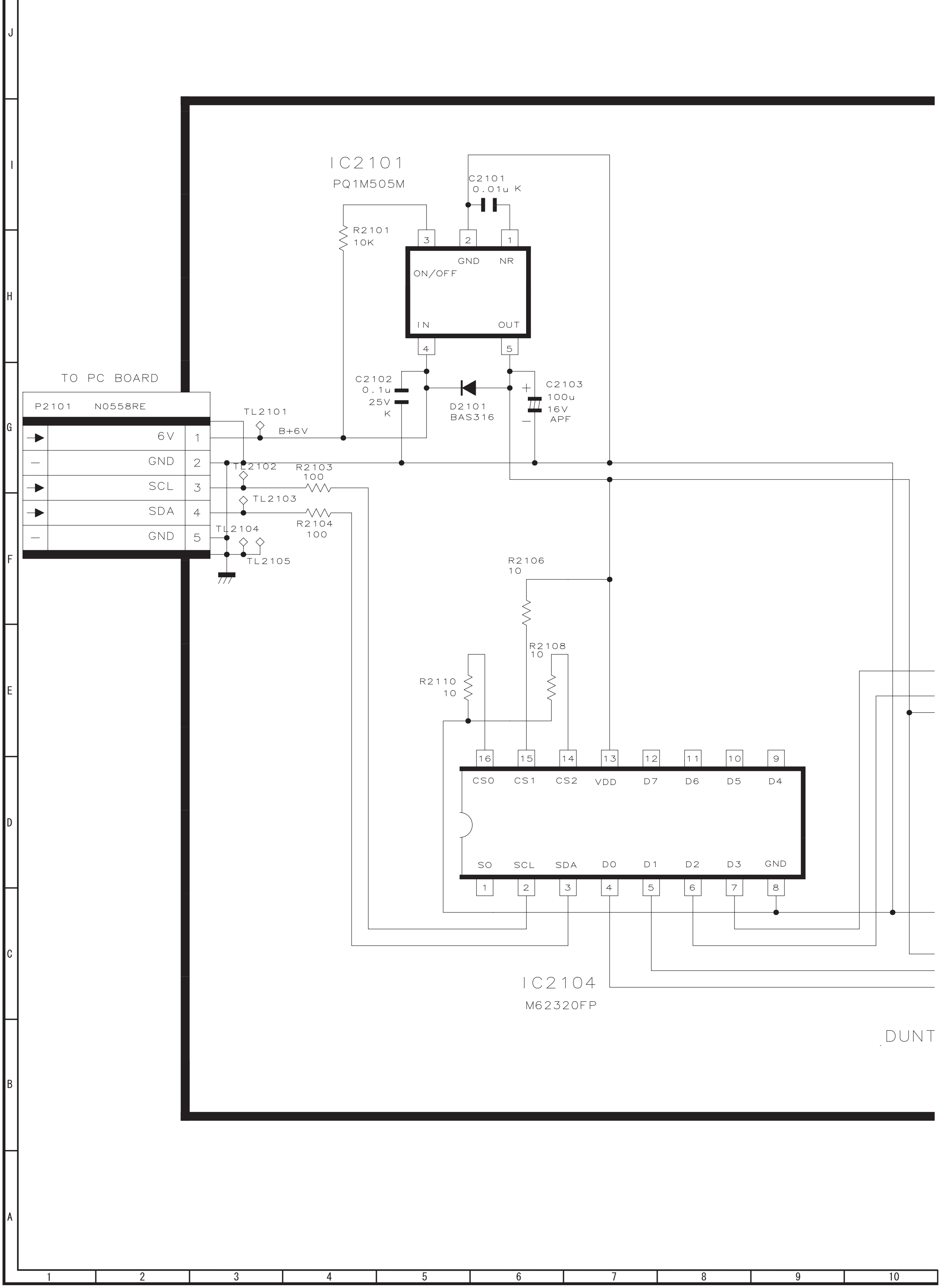
■R/C FRONT Unit

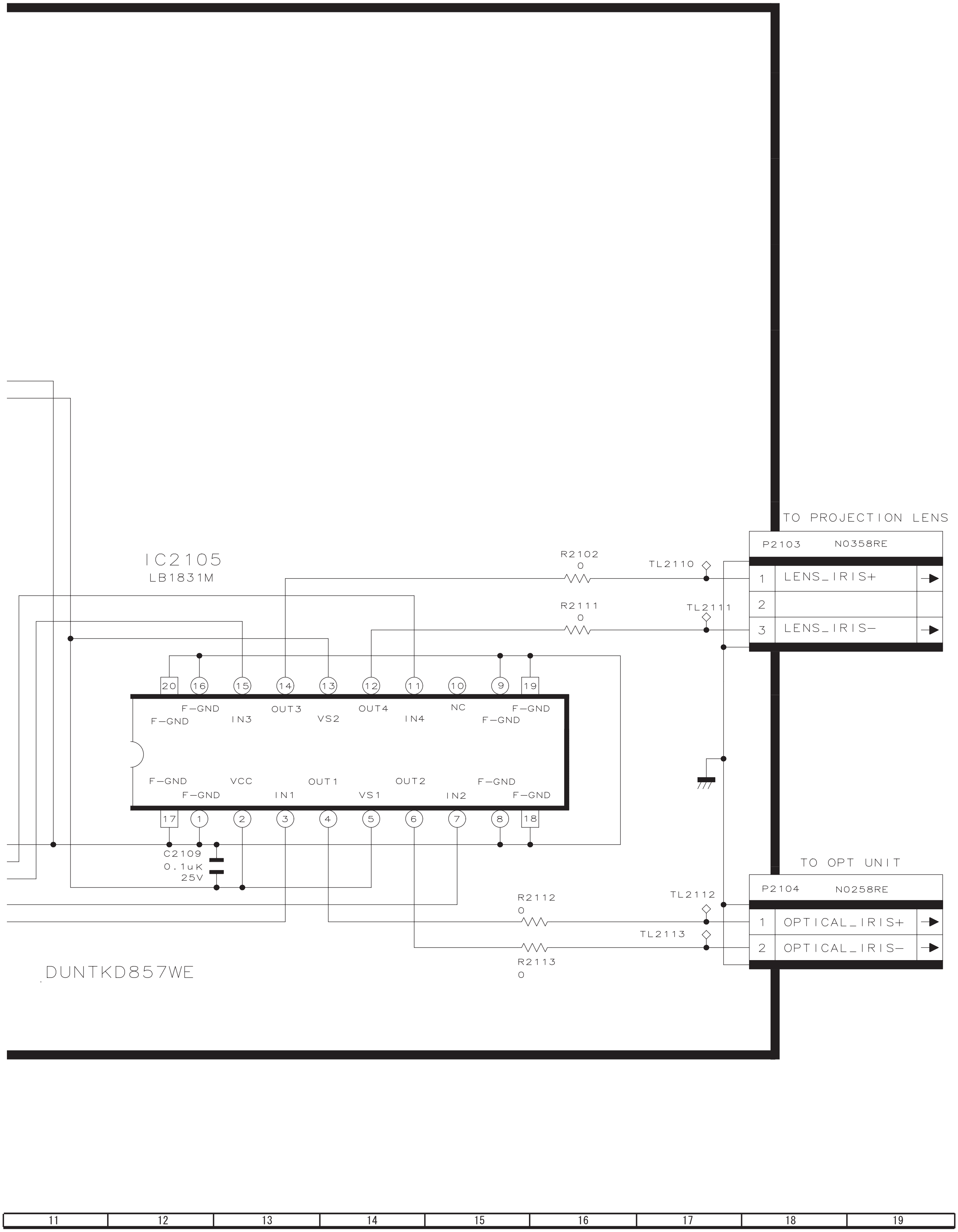

R/C
RMC2401
0239CEZZ
SLD2001
CA009WJFW
1
2
3
4.9
0
4.9
R2401
470
TL2404
TL2405
P2401
N0364TA
RC
BU5V
GND
R/C 1
1
2
3
TL2401
TL2402
TL2403
BU5V
R2402
22
C2401
0.1u Z
25V
C2403
100u
6.3V
DUNTKD854WE
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

■R/C REAR Unit

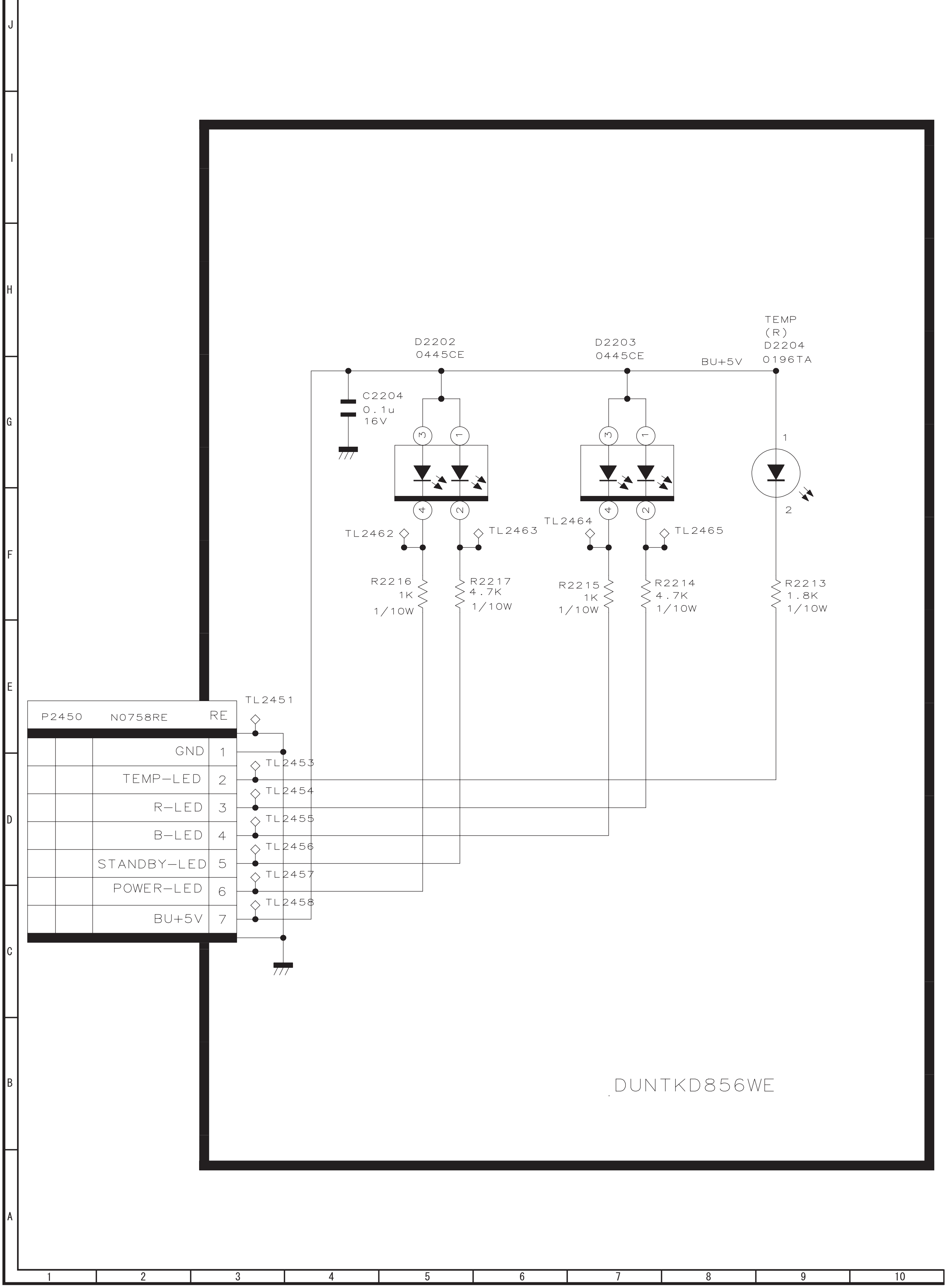

J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
R/C
RMC2402
0237CEZZ
1
2
3
4.9
0
4.9
TL2409
R2403
470
P2402
N0364TA
RA
BU5V
GND
R/C 1
1
2
3
TL2406
TL2407
TL2408
BU5V
R2404
22
C2404
0.1u Z
25V
C2406
100u
6.3V
APF
LUG2400
DUNTKD855WE

■IRIS DRIVE Unit


IC2101
PQ1M505M
C2101
0.01u K
R2101
10K
3
2
1
GND
NR
ON/OFF
IN
OUT
4
5
C2102
0.1u
25V
K
D2101
BAS316
C2103
100u
16V
APF
TO PC BOARD
P2101
N0558RE
TL2101
B+6V
6V
1
GND
2
SCL
3
SDA
4
GND
5
TL2102
R2103
100
TL2103
R2104
100
TL2104
TL2105
R2106
10
R2108
10
R2110
10
16
15
14
13
12
11
10
9
CS0
CS1
CS2
VDD
D7
D6
D5
D4
SO
SCL
SDA
D0
D1
D2
D3
GND
1
2
3
4
5
6
7
8
IC2104
M62320FP
DUNT
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

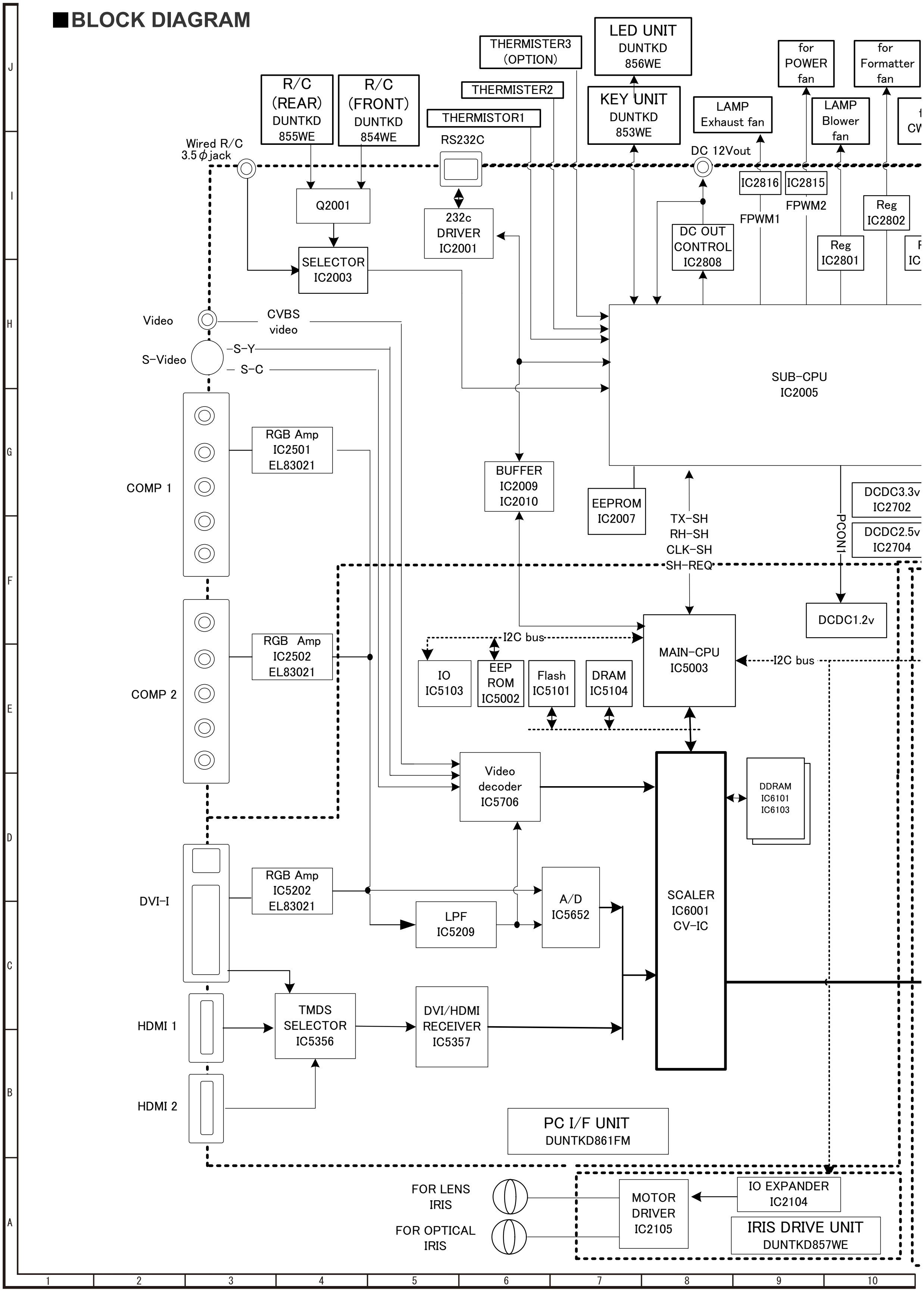

IC2105
LB1831M
F-GND
F-GND
IN3
OUT3
VS2
OUT4
IN4
NC
F-GND
F-GND
F-GND
F-GND
VCC
IN1
OUT1
VS1
OUT2
IN2
F-GND
F-GND
20
16
15
14
13
12
11
10
9
19
17
1
2
3
4
5
6
7
8
18
C2109
0.1uK
25V
R2102
0
R2111
0
R2112
0
R2113
0
TL2110
TL2111
TL2112
TL2113
TO PROJECTION LENS
P2103
N0358RE
1
LENS_IRIS+
2
3
LENS_IRIS−
TO OPT UNIT
P2104
N0258RE
1
OPTICAL_IRIS+
2
OPTICAL_IRIS−
DUNTKD857WE
11
12
13
14
15
16
17
18
19

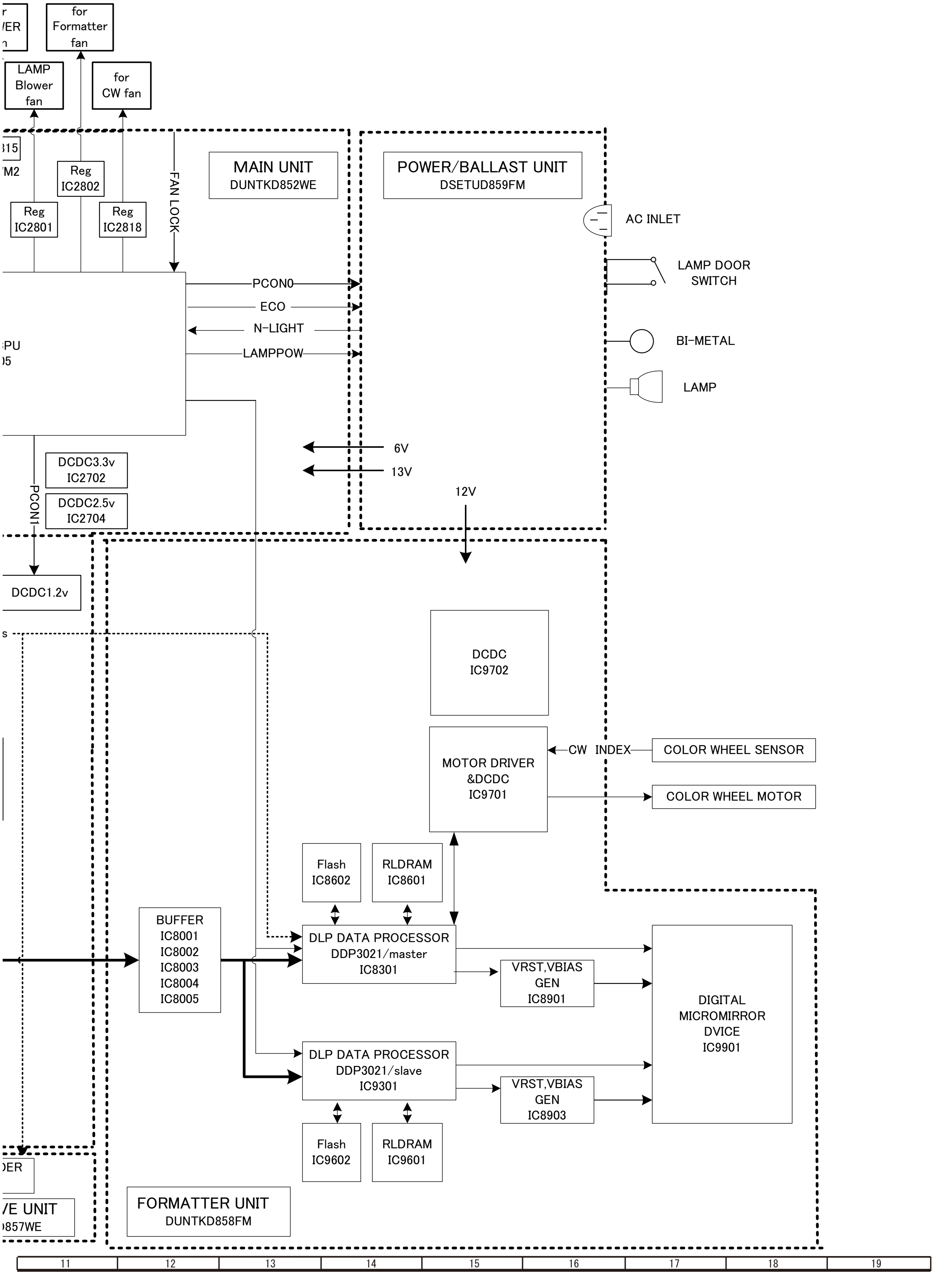
■LED Unit


D2202
0445CE
D2203
0445CE
TEMP
(R)
D2204
0196TA
BU+5V
C2204
0.1u
16V
TL2462
TL2463
TL2464
TL2465
R2216
1K
1/10W
R2217
4.7K
1/10W
R2215
1K
1/10W
R2214
4.7K
1/10W
R2213
1.8K
1/10W
TL2451
P2450
N0758RE
RE
GND 1
TEMP−LED 2
R−LED 3
B−LED 4
STANDBY−LED 5
POWER−LED 6
BU+5V 7
TL2453
TL2454
TL2455
TL2456
TL2457
TL2458
DUNTKD856WE
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

CHAPTER 6. BLOCK DIAGRAM/OVERALL WIRING DIAGRAM

[1] BLOCK DIAGRAM

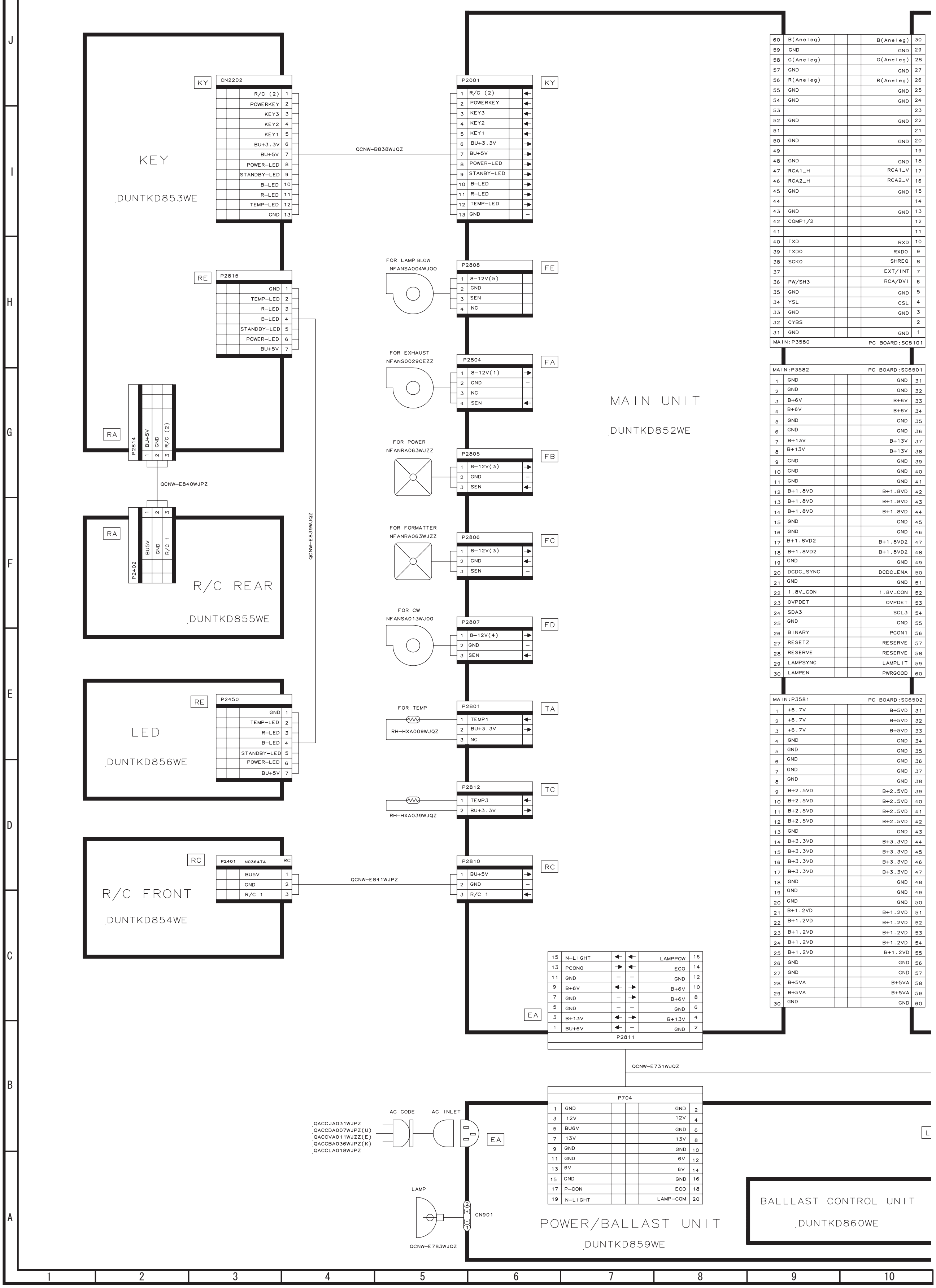

■BLOCK DIAGRAM
THERMISTER3 (OPTION)
LED UNIT DUNTKD 856WE
for POWER fan
for Formatter fan
R/C (REAR) DUNTKD 855WE
R/C (FRONT) DUNTKD 854WE
THERMISTER2
KEY UNIT DUNTKD 853WE
LAMP Exhaust fan
LAMP Blower fan
THERMISTOR1
Wired R/C 3.5φjack
RS232C
DC 12Vout
IC2816
IC2815
Q2001
232c DRIVER IC2001
FPWM1
FPWM2
Reg IC2802
DC OUT CONTROL IC2808
Reg IC2801
SELECTOR IC2003
Video
CVBS video
S-Video
S-Y
S-C
SUB-CPU IC2005
RGB Amp IC2501 EL83021
COMP 1
BUFFER IC2009 IC2010
EEPROM IC2007
TX-SH
RH-SH
CLK-SH
SH-REQ
PCON1
DCDC3.3v IC2702
DCDC2.5v IC2704
DCDC1.2v
RGB Amp IC2502 EL83021
COMP 2
I2C bus
IO IC5103
EEP ROM IC5002
Flash IC5101
DRAM IC5104
MAIN-CPU IC5003
I2C bus
Video decoder IC5706
DDRAM IC6101 IC6103
DVI-I
RGB Amp IC5202 EL83021
A/D IC5652
LPF IC5209
SCALER IC6001 CV-IC
HDMI 1
TMDS SELECTOR IC5356
DVI/HDMI RECEIVER IC5357
HDMI 2
PC I/F UNIT DUNTKD861FM
FOR LENS IRIS
FOR OPTICAL IRIS
MOTOR DRIVER IC2105
IO EXPANDER IC2104
IRIS DRIVE UNIT DUNTKD857WE
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

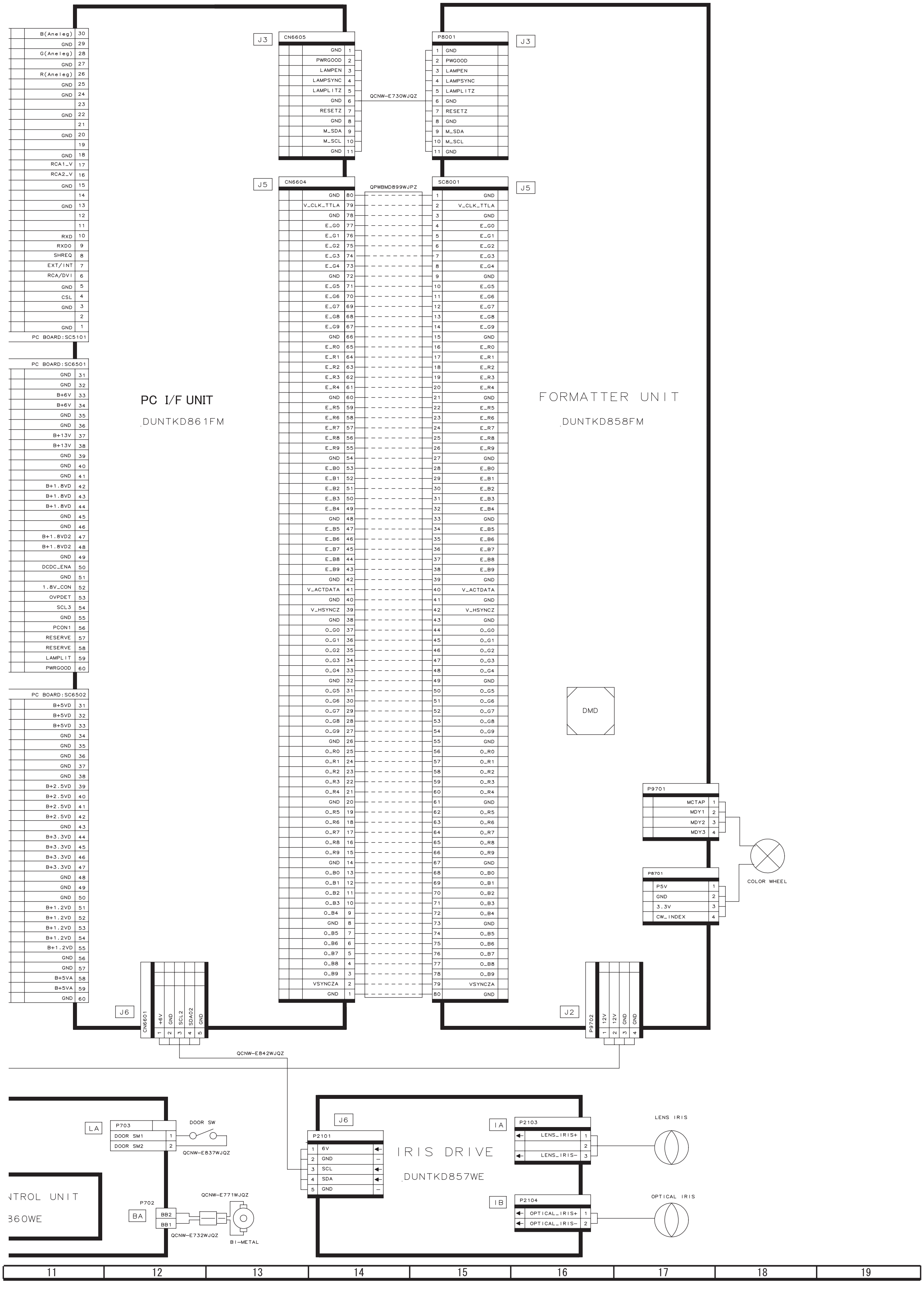


r
/ER
n
for
Formatter
fan
LAMP
Blower
fan
for
CW fan
315
/M2
Reg
IC2802
Reg
IC2801
Reg
IC2818
FAN LOCK
MAIN UNIT
DUNTKD852WE
POWER/BALLAST UNIT
DSETUD859FM
AC INLET
LAMP DOOR
SWITCH
PCON0
ECO
N-LIGHT
LAMPPOW
PU
05
BI-METAL
LAMP
6V
13V
DCDC3.3v
IC2702
DCDC2.5v
IC2704
PCON1
12V
DCDC1.2v
s
DCDC
IC9702
MOTOR DRIVER
&DCDC
IC9701
CW INDEX
COLOR WHEEL SENSOR
COLOR WHEEL MOTOR
Flash
IC8602
RLDRAM
IC8601
BUFFER
IC8001
IC8002
IC8003
IC8004
IC8005
DLP DATA PROCESSOR
DDP3021/master
IC8301
VRST,VBIAS
GEN
IC8901
DIGITAL
MICROMIRROR
DVICE
IC9901
DLP DATA PROCESSOR
DDP3021/slave
IC9301
VRST,VBIAS
GEN
IC8903
Flash
IC9602
RLDRAM
IC9601
DER
/E UNIT
)857WE
FORMATTER UNIT
DUNTKD858FM
11
12
13
14
15
16
17
18
19

[2] OVERALL WIRING DIAGRAM

■OVERALL WIRING DIAGRAM


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
KEY
DUNTKD853WE
KY
CN2202
R/C (2) 1
POWERKEY 2
KEY3 3
KEY2 4
KEY1 5
BU+3.3V 6
BU+5V 7
POWER-LED 8
STANDBY-LED 9
B-LED 10
R-LED 11
TEMP-LED 12
GND 13
QCNW-B838WJQZ
P2001
KY
1 R/C (2)
2 POWERKEY
3 KEY3
4 KEY2
5 KEY1
6 BU+3.3V
7 BU+5V
8 POWER-LED
9 STANBY-LED
10 B-LED
11 R-LED
12 TEMP-LED
13 GND
RE
P2815
GND 1
TEMP-LED 2
R-LED 3
B-LED 4
STANDBY-LED 5
POWER-LED 6
BU+5V 7
RA
P2814
1 BU+5V
2 GND
3 R/C (2)
QCNW-E840WJPZ
RA
P2402
1 BU5V
2 GND
3 R/C 1
R/C REAR
DUNTKD855WE
QCNW-E839WJQZ
LED
DUNTKD856WE
RE
P2450
GND 1
TEMP-LED 2
R-LED 3
B-LED 4
STANDBY-LED 5
POWER-LED 6
BU+5V 7
R/C FRONT
DUNTKD854WE
RC
P2401 N0364TA RC
BU5V 1
GND 2
R/C 1 3
QCNW-E841WJPZ
FOR LAMP BLOW
NFANSA004WJ00
P2808
FE
1 8-12V(5)
2 GND
3 SEN
4 NC
FOR EXHAUST
NFANS0029CEZZ
P2804
FA
1 8-12V(1)
2 GND
3 NC
4 SEN
FOR POWER
NFANRA063WJZZ
P2805
FB
1 8-12V(3)
2 GND
3 SEN
FOR FORMATTER
NFANRA063WJZZ
P2806
FC
1 8-12V(3)
2 GND
3 SEN
FOR CW
NFANSA013WJ00
P2807
FD
1 8-12V(4)
2 GND
3 SEN
FOR TEMP
RH-HXA009WJQZ
P2801
TA
1 TEMP1
2 BU+3.3V
3 NC
RH-HXA039WJQZ
P2812
TC
1 TEMP3
2 BU+3.3V
P2810
RC
1 BU+5V
2 GND
3 R/C 1
MAIN UNIT
DUNTKD852WE
60 B(Aneleg) B(Aneleg) 30
59 GND GND 29
58 G(Aneleg) G(Aneleg) 28
57 GND GND 27
56 R(Aneleg) R(Aneleg) 26
55 GND GND 25
54 GND GND 24
53 23
52 GND GND 22
51 21
50 GND GND 20
49 19
48 GND GND 18
47 RCA1_H RCA1_V 17
46 RCA2_H RCA2_V 16
45 GND GND 15
44 14
43 GND GND 13
42 COMP1/2 12
41 11
40 TXD RXD 10
39 TXD0 RXD0 9
38 SCK0 SHREQ 8
37 EXT/INT 7
36 PW/SH3 RCA/DVI 6
35 GND GND 5
34 YSL CSL 4
33 GND GND 3
32 CYBS 2
31 GND GND 1
MAIN:P3580 PC BOARD:SC5101
MAIN:P3582 PC BOARD:SC6501
1 GND GND 31
2 GND GND 32
3 B+6V B+6V 33
4 B+6V B+6V 34
5 GND GND 35
6 GND GND 36
7 B+13V B+13V 37
8 B+13V B+13V 38
9 GND GND 39
10 GND GND 40
11 GND GND 41
12 B+1.8VD B+1.8VD 42
13 B+1.8VD B+1.8VD 43
14 B+1.8VD B+1.8VD 44
15 GND GND 45
16 GND GND 46
17 B+1.8VD2 B+1.8VD2 47
18 B+1.8VD2 B+1.8VD2 48
19 GND GND 49
20 DCDC_SYNC DCDC_ENA 50
21 GND GND 51
22 1.8V_CON 1.8V_CON 52
23 OVPDET OVPDET 53
24 SDA3 SCL3 54
25 GND GND 55
26 BINARY PCON1 56
27 RESETZ RESERVE 57
28 RESERVE RESERVE 58
29 LAMPSYNC LAMPLIT 59
30 LAMPEN PWRGOOD 60
MAIN:P3581 PC BOARD:SC6502
1 +6.7V B+5VD 31
2 +6.7V B+5VD 32
3 +6.7V B+5VD 33
4 GND GND 34
5 GND GND 35
6 GND GND 36
7 GND GND 37
8 GND GND 38
9 B+2.5VD B+2.5VD 39
10 B+2.5VD B+2.5VD 40
11 B+2.5VD B+2.5VD 41
12 B+2.5VD B+2.5VD 42
13 GND GND 43
14 B+3.3VD B+3.3VD 44
15 B+3.3VD B+3.3VD 45
16 B+3.3VD B+3.3VD 46
17 B+3.3VD B+3.3VD 47
18 GND GND 48
19 GND GND 49
20 GND GND 50
21 B+1.2VD B+1.2VD 51
22 B+1.2VD B+1.2VD 52
23 B+1.2VD B+1.2VD 53
24 B+1.2VD B+1.2VD 54
25 B+1.2VD B+1.2VD 55
26 GND GND 56
27 GND GND 57
28 B+5VA B+5VA 58
29 B+5VA B+5VA 59
30 GND GND 60
EA
15 N-LIGHT LAMPPOW 16
13 PCON0 ECO 14
11 GND GND 12
9 B+6V B+6V 10
7 GND B+6V 8
5 GND GND 6
3 B+13V B+13V 4
1 BU+6V GND 2
P2811
QCNW-E731WJQZ
P704
1 GND GND 2
3 12V 12V 4
5 BU6V GND 6
7 13V 13V 8
9 GND GND 10
11 GND 6V 12
13 6V 6V 14
15 GND GND 16
17 P-CON ECO 18
19 N-LIGHT LAMP-COM 20
AC CODE
AC INLET
QACCJA031WJPZ
QACCDA007WJPZ(U)
QACCVA011WJZZ(E)
QACCBA036WJPZ(K)
QACCLA018WJPZ
EA
LAMP
CN901
2
(+)
(-)
1
QCNW-E783WJQZ
POWER/BALLAST UNIT
DUNTKD859WE
BALLLAST CONTROL UNIT
DUNTKD860WE
L


PC I/F UNIT
DUNTKD861FM
FORMATTER UNIT
DUNTKD858FM
IRIS DRIVE
DUNTKD857WE
NTROL UNIT
860WE
PC BOARD:SC5101
PC BOARD:SC6501
PC BOARD:SC6502
J3
CN6605
P8001
QCNW-E730WJQZ
J5
CN6604
SC8001
QPWBMD899WJPZ
GND
PWRGOOD
LAMPEN
LAMPSYNC
LAMPLITZ
RESETZ
M_SDA
M_SCL
V_CLK_TTLA
V_ACTDATA
V_HSYNCZ
VSYNCZA
J6
CN6601
+6V
SCL2
SDA02
J2
P9702
12V
QCNW-E842WJQZ
DMD
P9701
MCTAP
MDY1
MDY2
MDY3
P8701
P5V
3.3V
CW_INDEX
COLOR WHEEL
LA
P703
DOOR SM1
DOOR SM2
DOOR SW
QCNW-E837WJQZ
P702
BA
BB2
BB1
QCNW-E771WJQZ
QCNW-E732WJQZ
BI-METAL
P2101
6V
SCL
SDA
IA
P2103
LENS_IRIS+
LENS_IRIS-
LENS IRIS
IB
P2104
OPTICAL_IRIS+
OPTICAL_IRIS-
OPTICAL IRIS
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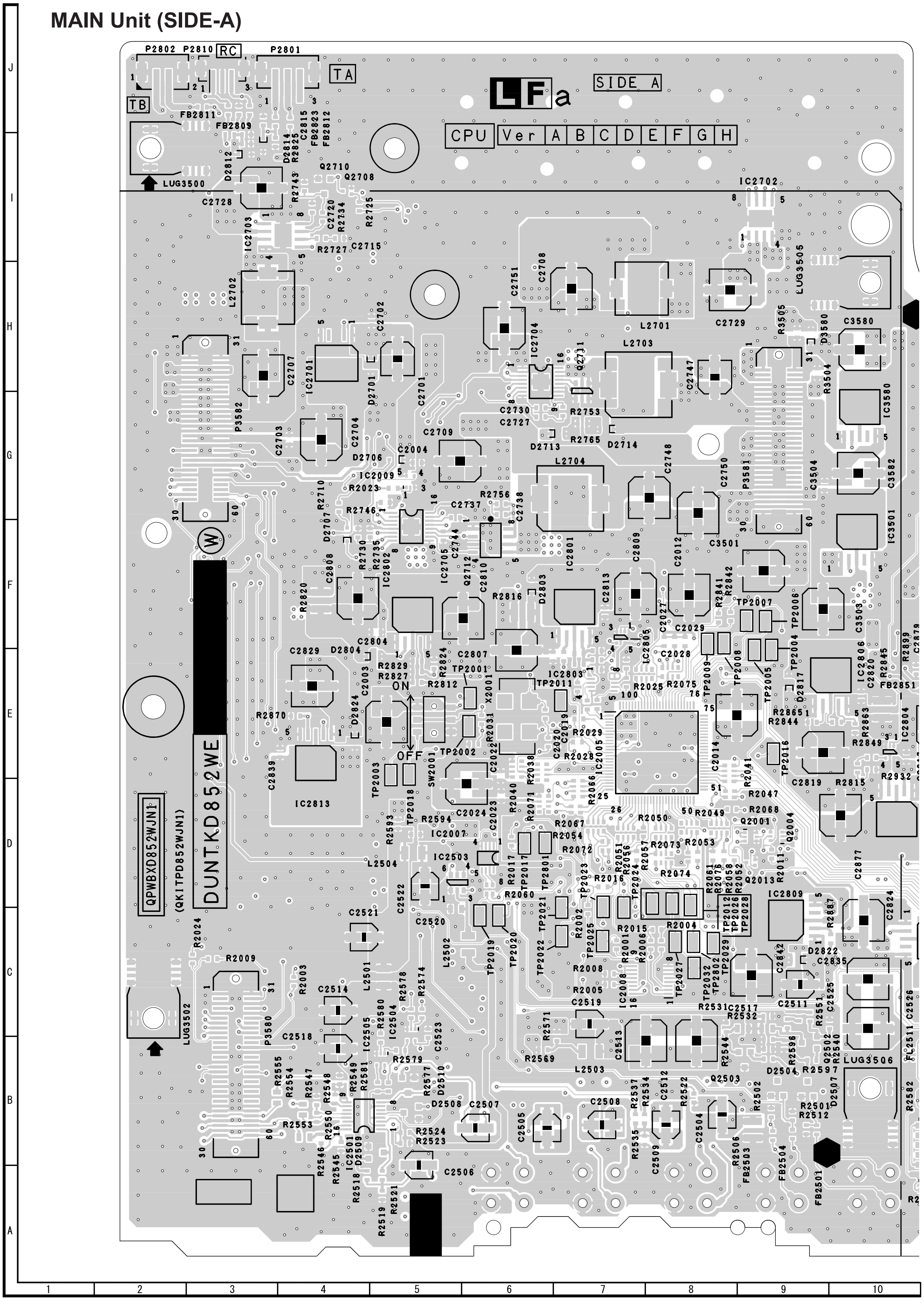
12
13
14
15
16
17
18
19

CHAPTER 7. PRINTED WIRING BOARD

[1] MAIN Unit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CPU Ver A B C D E F G H
DUNTKD852WE
QPWBXD852WJN1
(QKITPD852WJN1)
J
I
H
G
F
E
D
C
B
A
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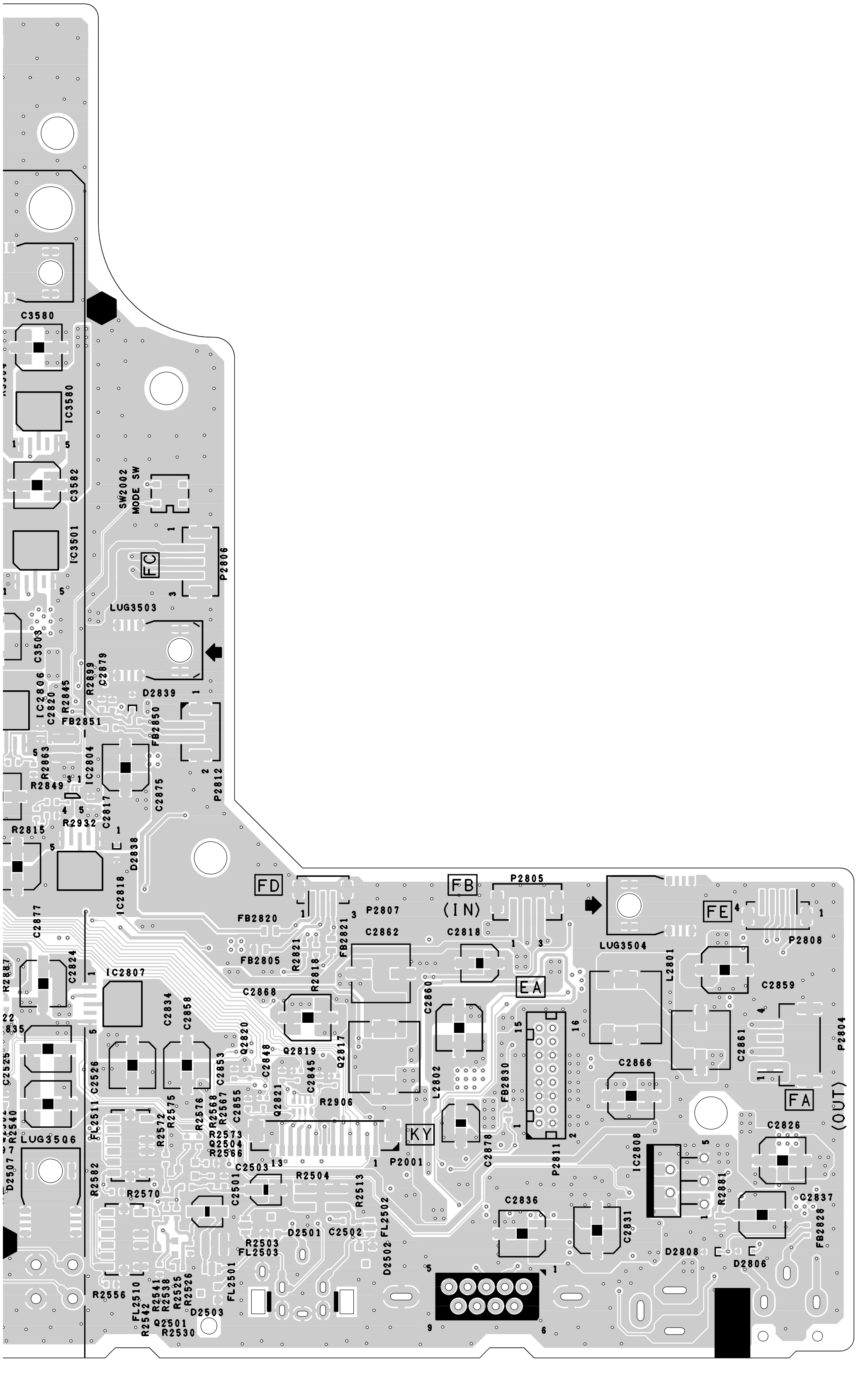
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C3582
SW2002
MODE SW
IC3501
C3503
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FC
LUG3503
D2839
C2879
R2899
IC2806
C2820
R2845
FB2851
FB2850
P2812
R2863
IC2804
R2849
C2875
C2817
R2932
R2815
D2838
IC2818
C2877
FD
FB2820
P2807
FB
(IN)
P2805
FB2821
R2821
R2818
FB2805
C2862
C2818
LUG3504
FE
P2808
L2801
C2859
C2824
IC2807
C2868
EA
C2860
R2887
C2834
C2858
Q2820
C2848
Q2819
Q2817
C2845
C2866
C2861
P2804
C2853
C2525
C2526
FL2511
R2575
R2576
R2568
R2567
R2573
R2504
R2566
C2855
Q2821
R2906
L2802
FB2830
P2811
FA
(OUT)
C2826
R2572
LUG3506
D2507
R2540
R2582
R2570
C2503
R2504
R2513
KY
P2001
C2878
IC2808
R2881
C2837
C2501
C2836
C2831
FB2828
R2503
FL2503
D2501
C2502
FL2502
D2502
D2808
D2806
R2556
FL2510
R2542
R2541
R2538
R2525
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R2530
D2503
1
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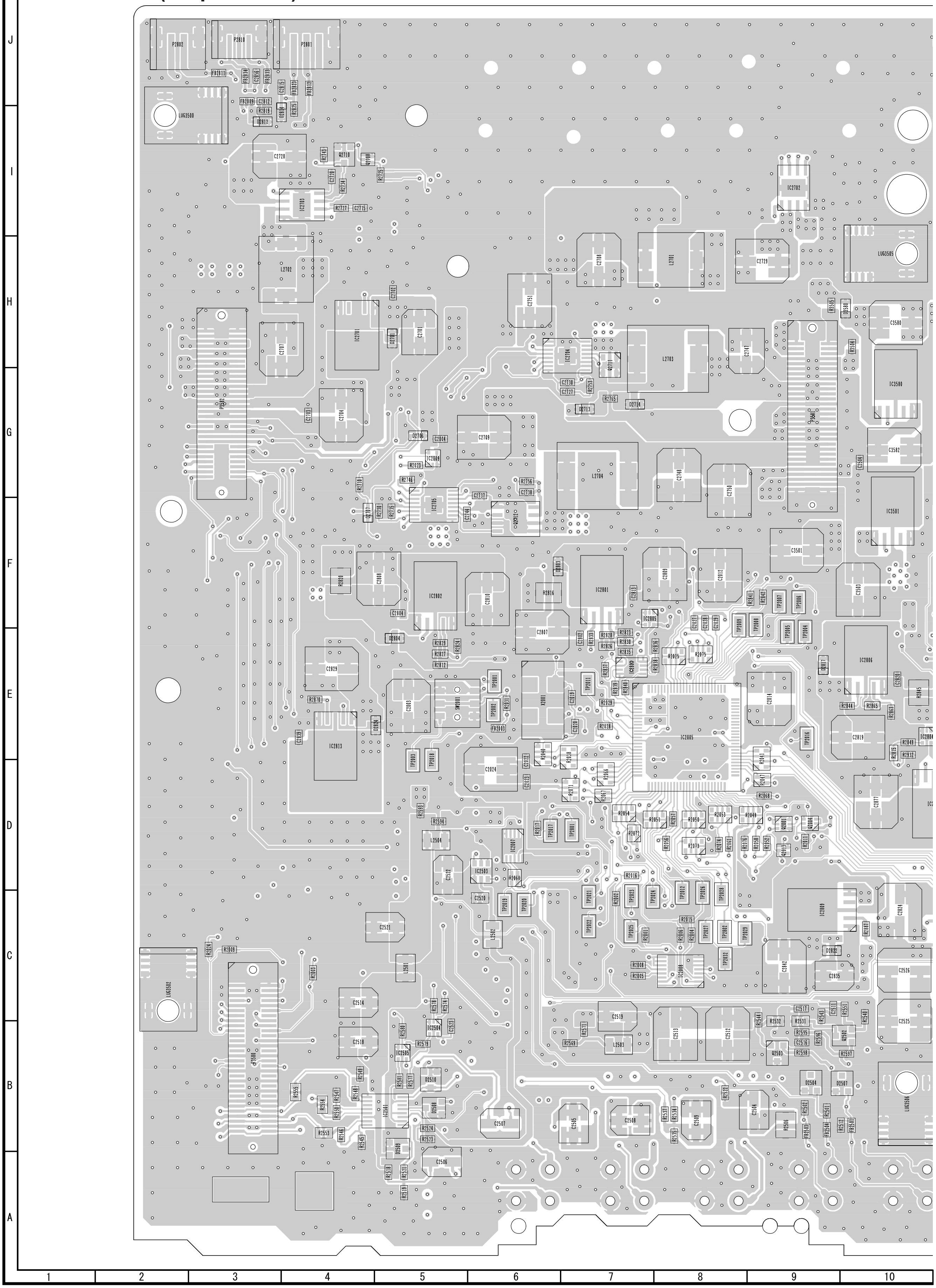
19

MAIN Unit (Chip SIDE-A)


J
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H
G
F
E
D
C
B
A
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3
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5
6
7
8
9
10
P2802
P2810
P2801
LUG3500
C2728
IC2702
L2701
C2729
LUG3505
L2702
IC2701
L2703
IC3580
IC3501
L2704
IC2802
IC2801
IC2806
IC2805
IC2813
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C2525
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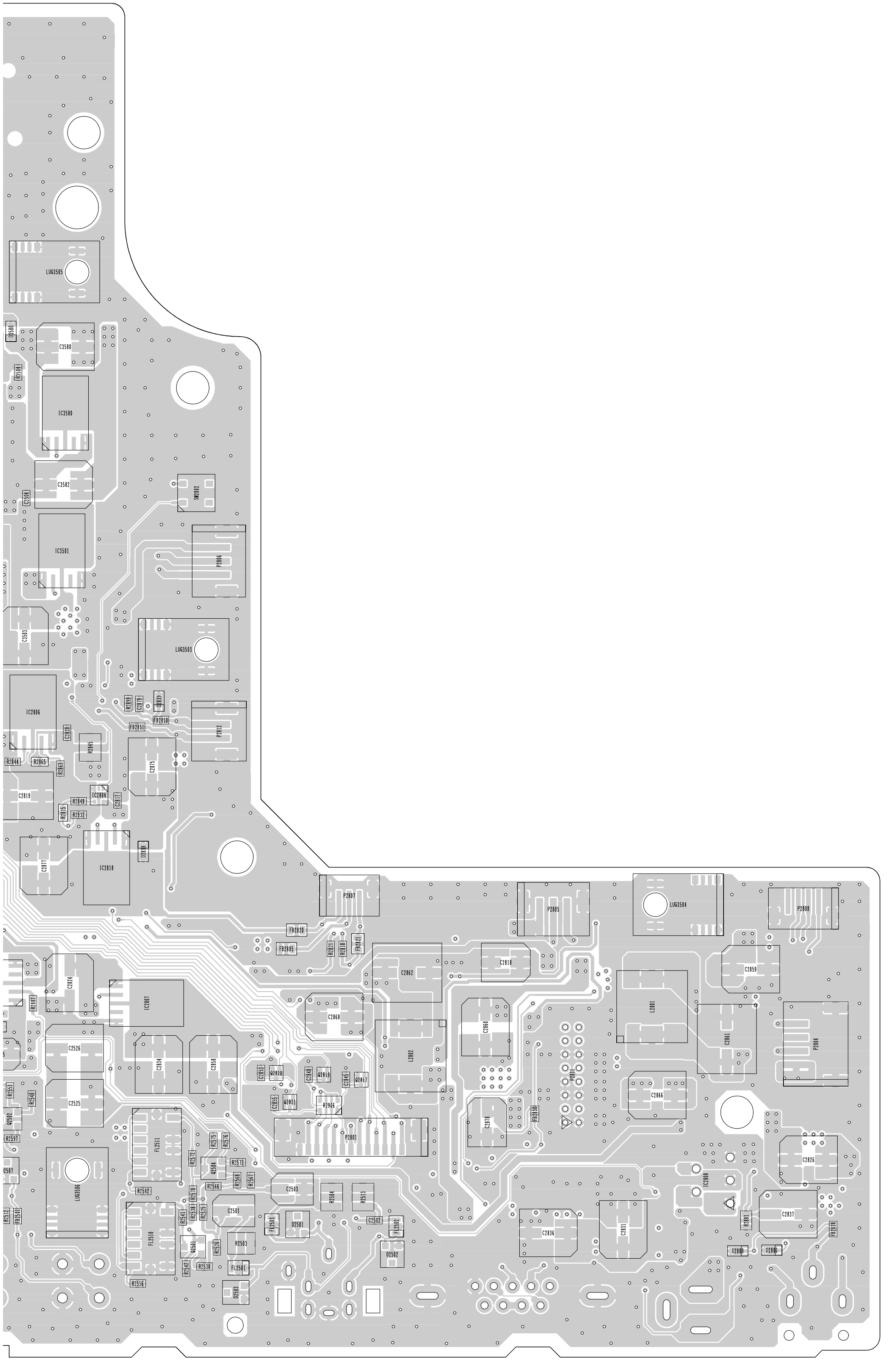
LUG3506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C3582
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SW2802
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C3581
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IC2806
P2812
C2815
C2819
IC2818
C2877
P2807
P2805
LUG3504
P2808
FB2820
FB2805
C2862
C2818
C2859
C2824
IC2807
C2868
C2860
L2802
L2801
C2861
P2804
C2526
C2834
C2858
C2525
C2866
P2801
C2878
FL2511
LUG3506
FL2510
C2503
C2501
R2504
R2511
D2501
R2503
FL2501
D2503
C2502
D2502
C2836
C2831
IC2808
C2826
C2837
11
12
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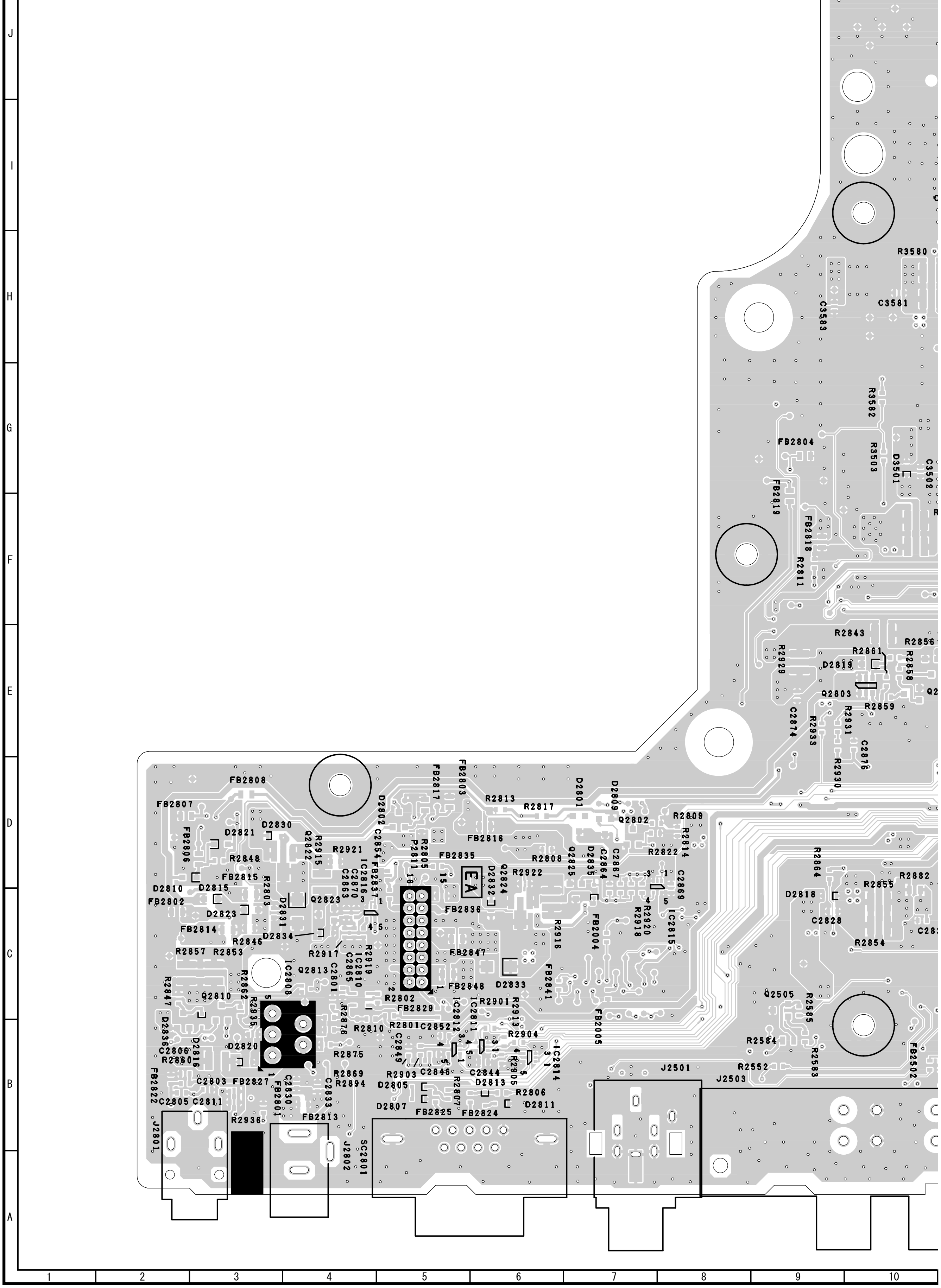
14
15
16
17
18
19

MAIN Unit (SIDE-B)


J
I
H
G
F
E
D
C
B
A
1
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3
4
5
6
7
8
9
10
R3580
C3583
C3581
R3582
FB2804
R3503
D3501
C3502
FB2819
FB2818
R2811
R2843
R2856
R2861
R2858
R2929
D2819
Q2803
R2859
C2874
R2933
R2931
C2876
R2930
FB2808
FB2807
FB2806
D2821
D2830
Q2822
R2915
R2921
D2802
C2854
FB2817
FB2803
R2813
R2817
D2801
D2809
Q2802
R2809
R2814
R2805
P2811
FB2835
FB2816
R2808
Q2825
D2835
C2864
C2867
R2822
C2869
R2864
R2855
R2882
D2818
C2828
R2854
R2848
FB2815
R2803
IC2816
C2870
C2863
FB2837
EA
D2832
Q2824
R2922
D2810
D2815
FB2802
D2823
D2831
Q2823
FB2836
R2916
FB2004
R2920
R2918
IC2815
FB2814
D2834
R2846
R2857
R2853
R2917
R2919
IC2810
C2865
C2801
FB2847
FB2841
R2847
R2862
IC2808
Q2813
FB2848
D2833
Q2810
R2935
R2876
R2802
FB2829
R2901
R2913
IC2812
IC2811
Q2505
R2585
D2836
D2816
D2820
R2810
R2801
C2852
C2849
R2904
R2905
IC2814
FB2005
R2584
R2583
C2806
R2860
R2875
R2869
R2894
R2903
C2846
C2844
D2813
R2807
R2806
D2811
J2501
R2552
J2503
FB2502
FB2822
C2803
FB2827
C2830
FB2801
C2833
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FB2813
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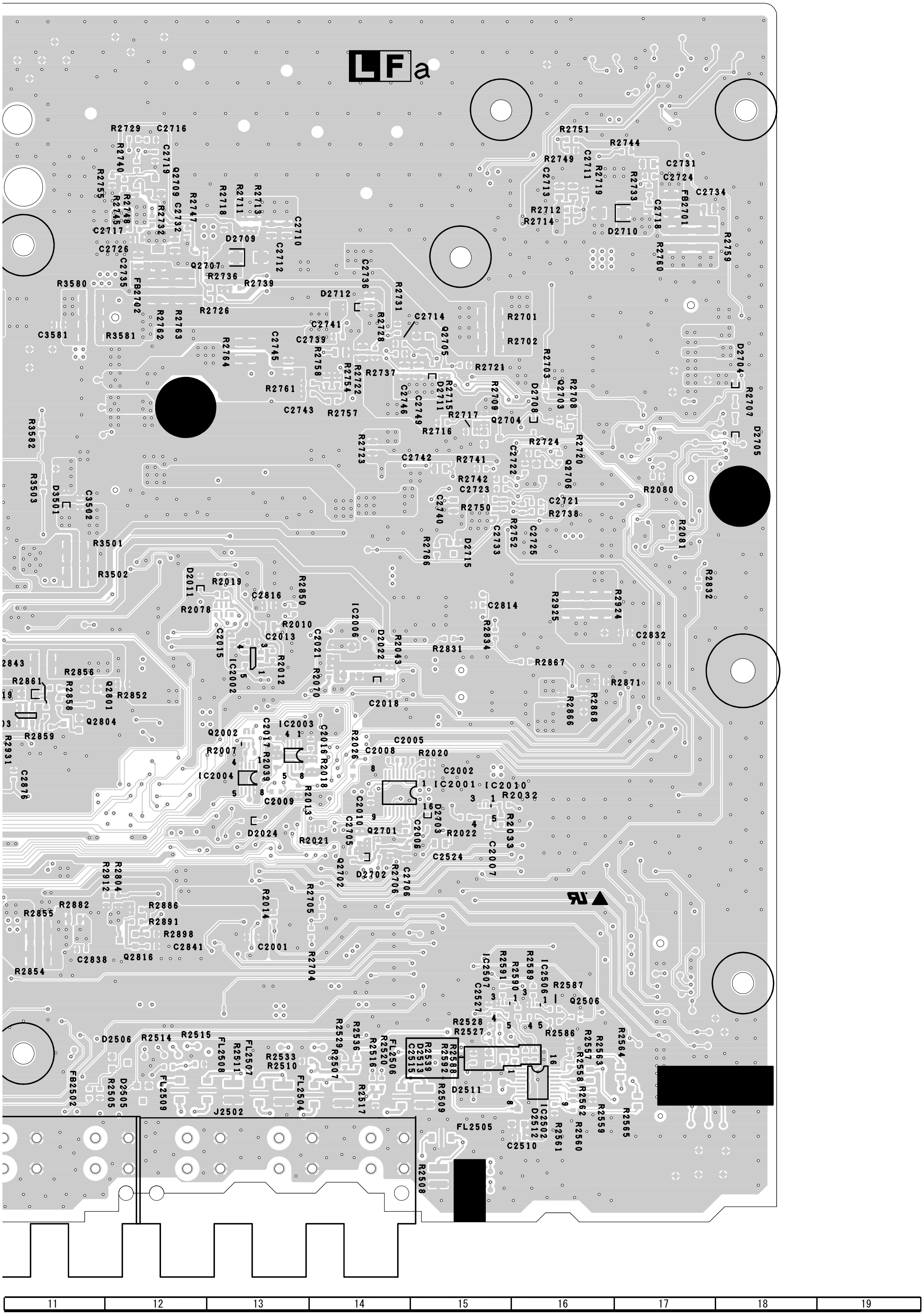
SC2801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Q2709
C2732
R2748
R2745
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R2718
R2711
R2713
C2717
C2710
D2709
C2726
C2735
C2712
Q2707
R2736
R3580
FB2702
R2739
R2726
R2762
R2763
C3581
R3581
C2745
R2764
C2736
D2712
R2731
C2741
C2714
R2728
C2739
Q2705
R2758
R2754
R2722
R2737
R2761
C2743
R2757
C2746
C2749
D2711
R2715
R2709
R2717
R2716
R2751
R2744
R2749
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R2701
R2702
R2703
R2721
D2704
R2708
Q2703
D2708
Q2704
R2707
D2705
R2724
R2720
Q2706
R2723
C2742
R2741
C2722
R2742
C2723
R2080
C2721
R2738
C2740
R2750
R2752
C2725
C2733
D2715
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R2081
R3582
R3503
D3501
C3502
R3501
R3502
D2011
R2019
R2850
C2816
R2078
R2010
IC2006
C2013
C2015
C2021
D2022
R2043
R2012
IC2002
R2070
R2831
R2834
C2814
R2925
R2924
R2832
C2832
R2867
R2871
R2868
R2866
2843
R2861
R2856
R2858
Q2801
R2852
Q2804
R2859
R2931
C2876
C2018
IC2003
Q2002
C2017
C2016
R2026
C2008
C2005
R2020
R2007
R2039
R2018
C2002
IC2004
IC2001
IC2010
R2013
C2009
R2032
C2010
D2703
R2033
D2024
C2705
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C2006
R2022
R2021
C2007
C2524
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D2702
R2706
C2706
R2804
R2912
R2882
R2886
R2855
R2891
R2898
C2841
R2014
R2705
C2001
R2704
C2838
Q2816
R2854
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R2591
R2590
R2589
IC2506
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C2527
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D2506
R2514
R2515
FL2508
R2511
FL2507
R2533
R2510
R2536
R2529
R2507
R2516
R2520
FL2506
C2515
D2513
R2539
R2592
R2588
R2557
R2563
R2564
R2558
R2562
FB2502
R2505
D2505
FL2509
FL2504
R2517
D2511
R2509
IC2502
D2512
R2561
R2559
R2560
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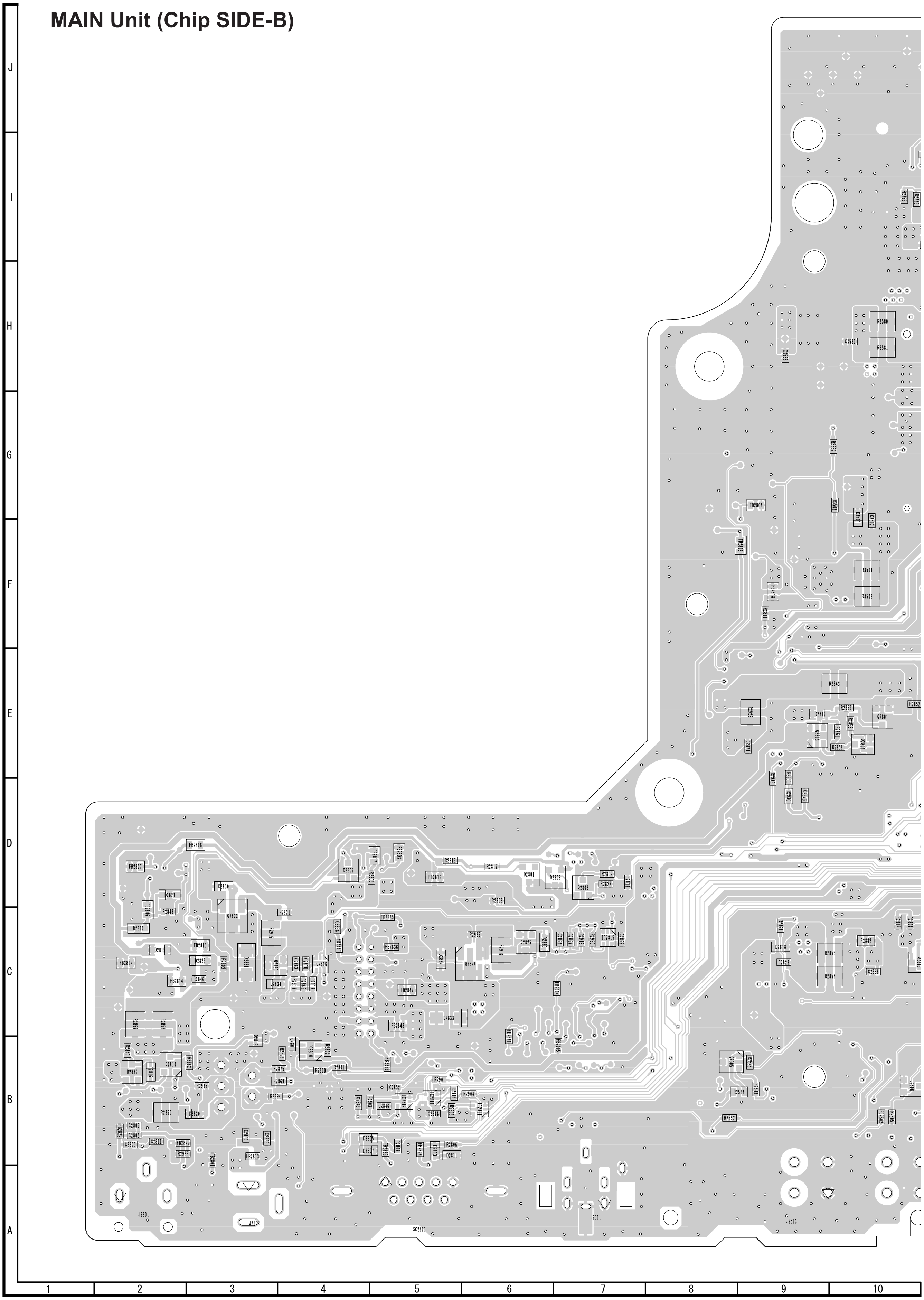
MAIN Unit (Chip SIDE-B)


J
I
H
G
F
E
D
C
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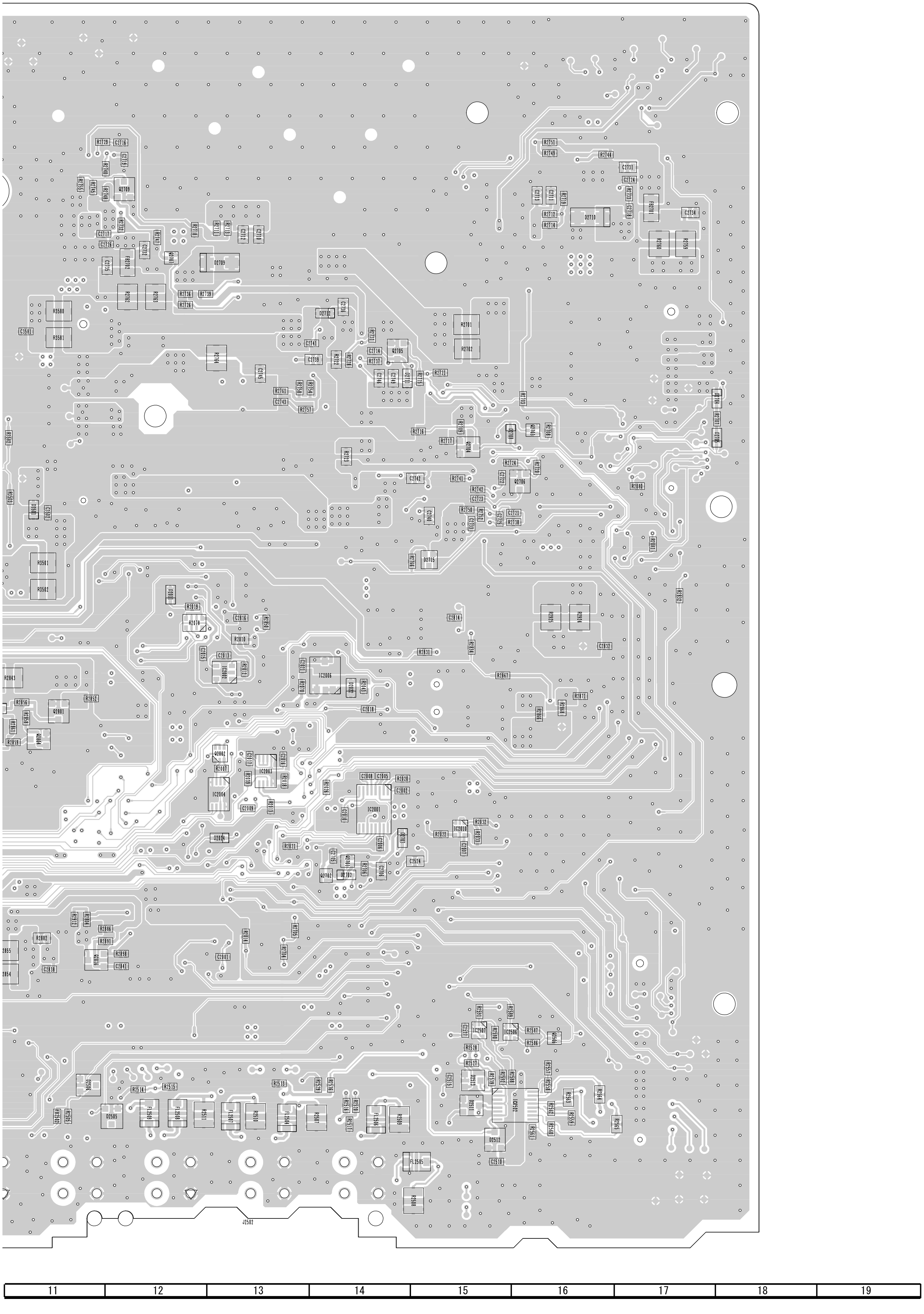
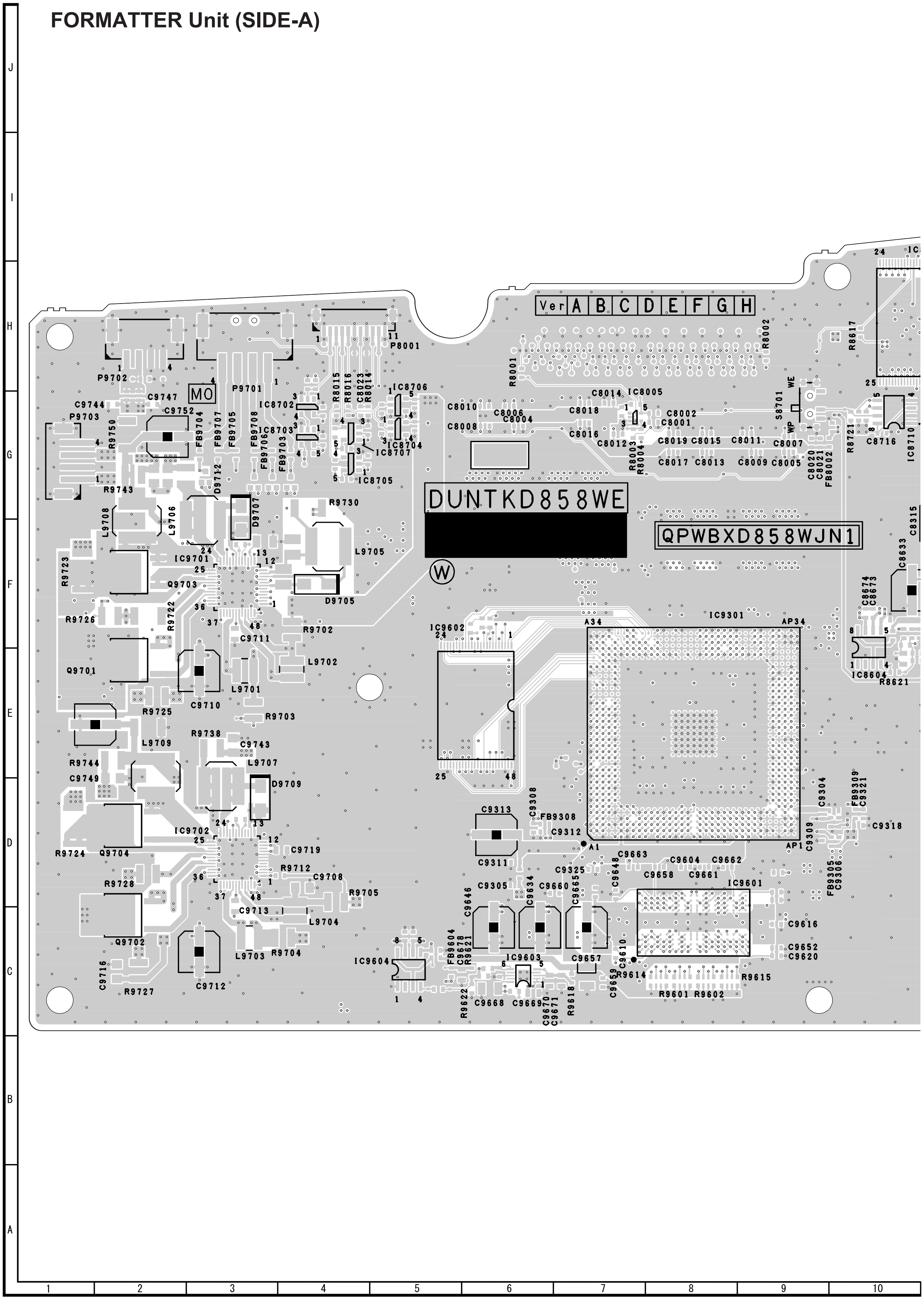
J2802
J2501
J2503
SC2801



[2] FORMATTER Unit

FORMATTER Unit (SIDE-A)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I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
Ver A B C D E F G H
DUNTKD858WE
[redacted]
QPWBXD858WJN1
W
MO
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P9701
P9703
P8001
C9747
C9744
C9752
R9750
R9743
FB9704
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FB9708
FB9706
FB9703
D9712
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IC8703
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R8016
C8023
R8014
IC8706
IC8704
IC8707
IC8705
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C8008
C8006
C8004
C8014
IC8005
C8018
C8016
C8012
R8003
R8004
C8002
C8001
C8019
C8015
C8011
C8007
C8017
C8013
C8009
C8005
C8020
C8021
FB8002
S8701
WE
WP
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C8633
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C8673
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R8621
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D9707
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L9705
IC9701
Q9703
D9705
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R9722
R9702
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Q9701
C9710
L9701
R9725
R9703
R9738
C9743
L9709
L9707
R9744
C9749
D9709
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C9708
R9724
Q9704
R9728
R9705
C9713
L9704
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R9704
C9716
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AP34
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R9601
R9602
R9622
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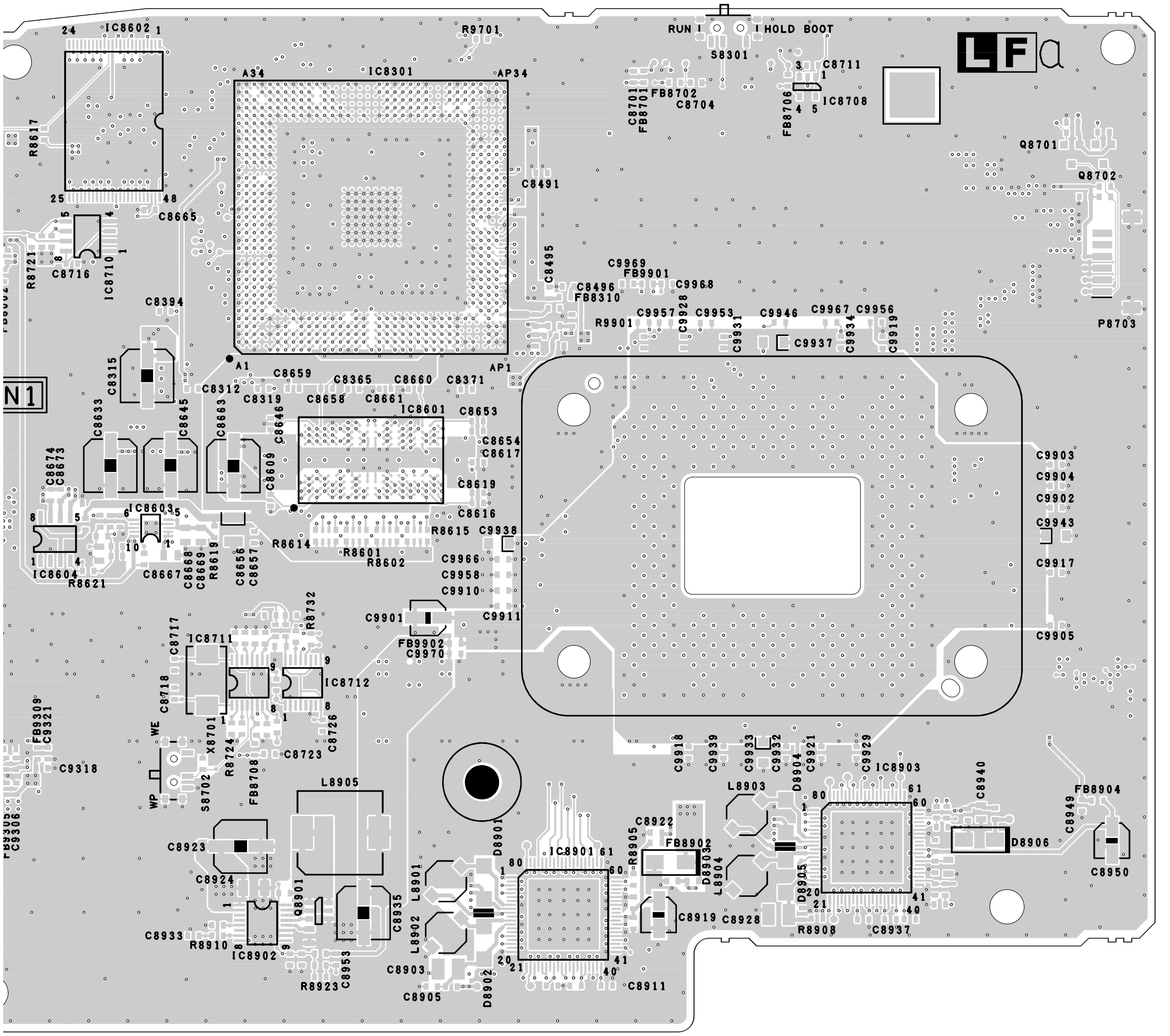
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BOOT
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FB8902
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C9929
D8904
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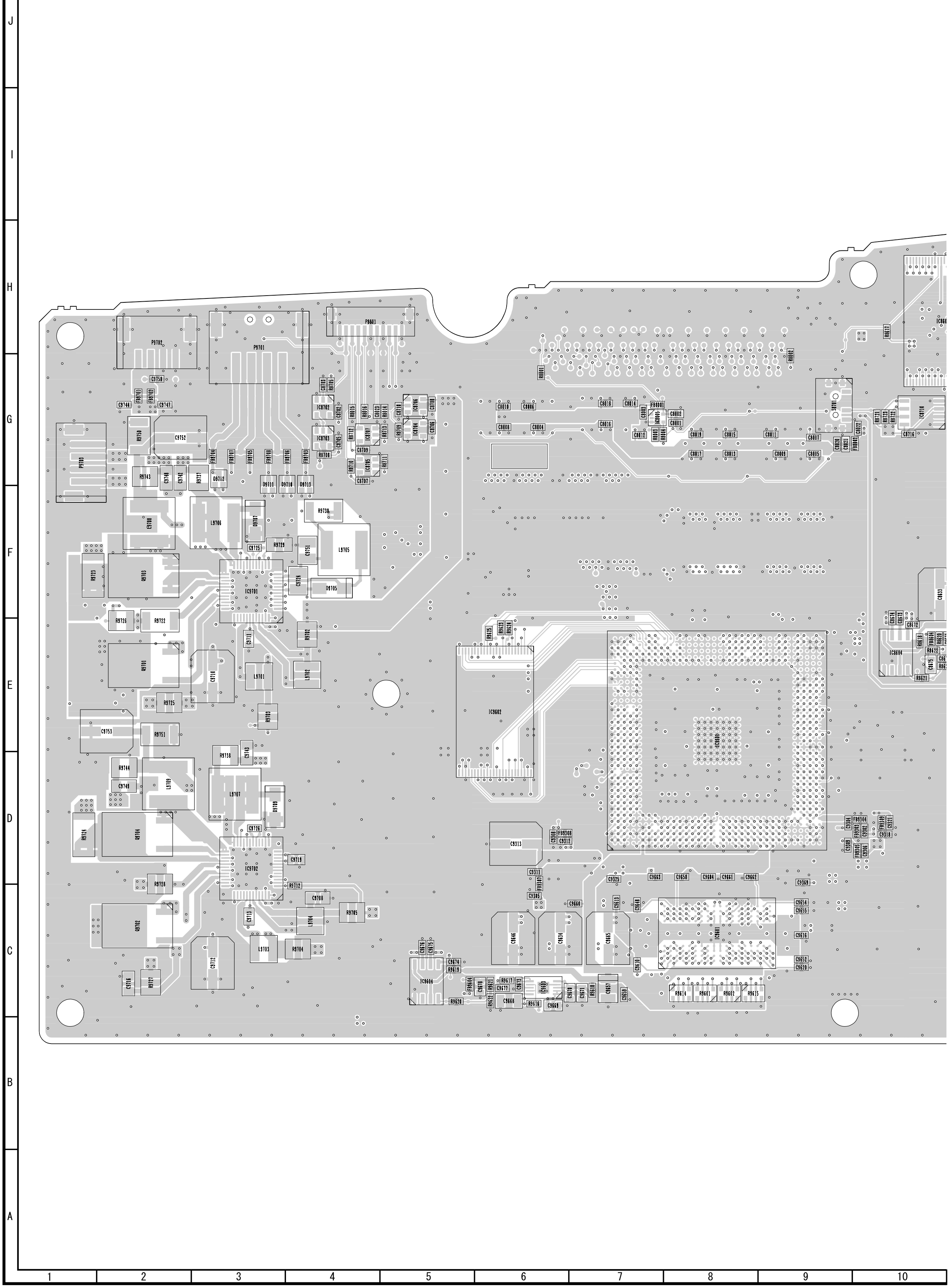
LFa

FORMATTER Unit (Chip SIDE-A)


J
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7
8
9
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P9702
P9701
P8601
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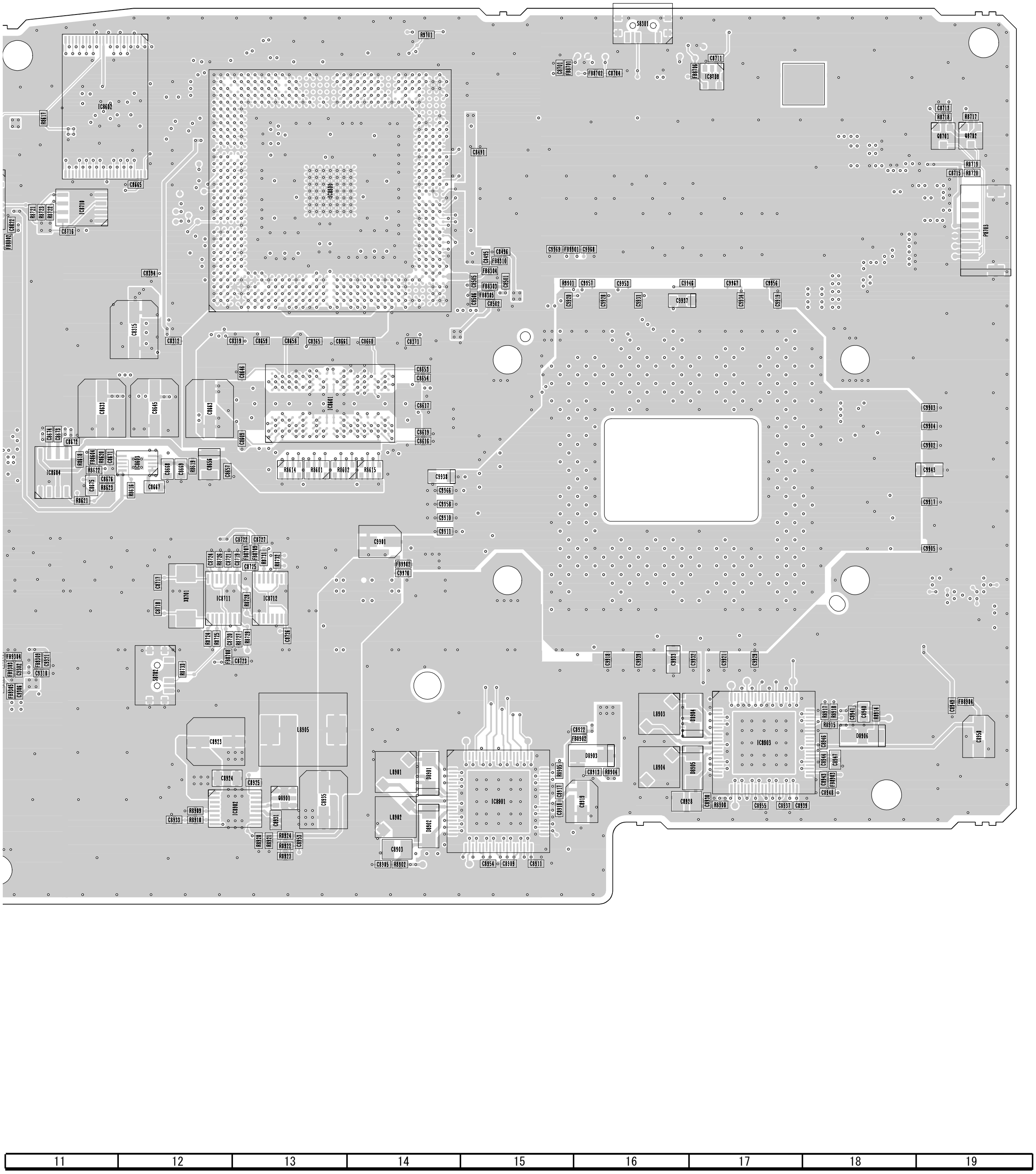
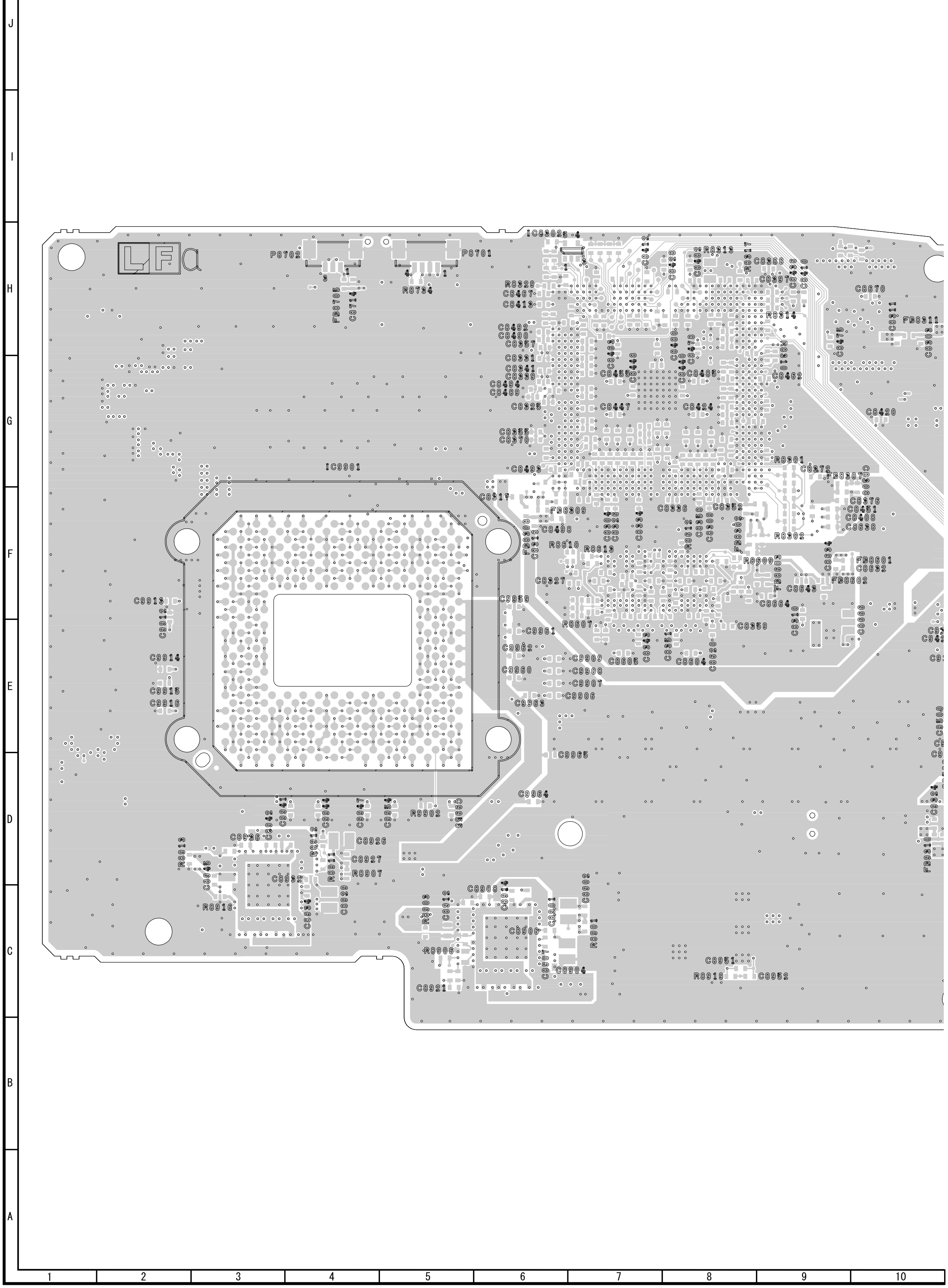
IC9601
IC9604



FORMATTER Unit (SIDE-B)


J
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P8701
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R8317
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C8436
C8410
C8412
C8428
C8482
R8329
C8467
C8413
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FB8307
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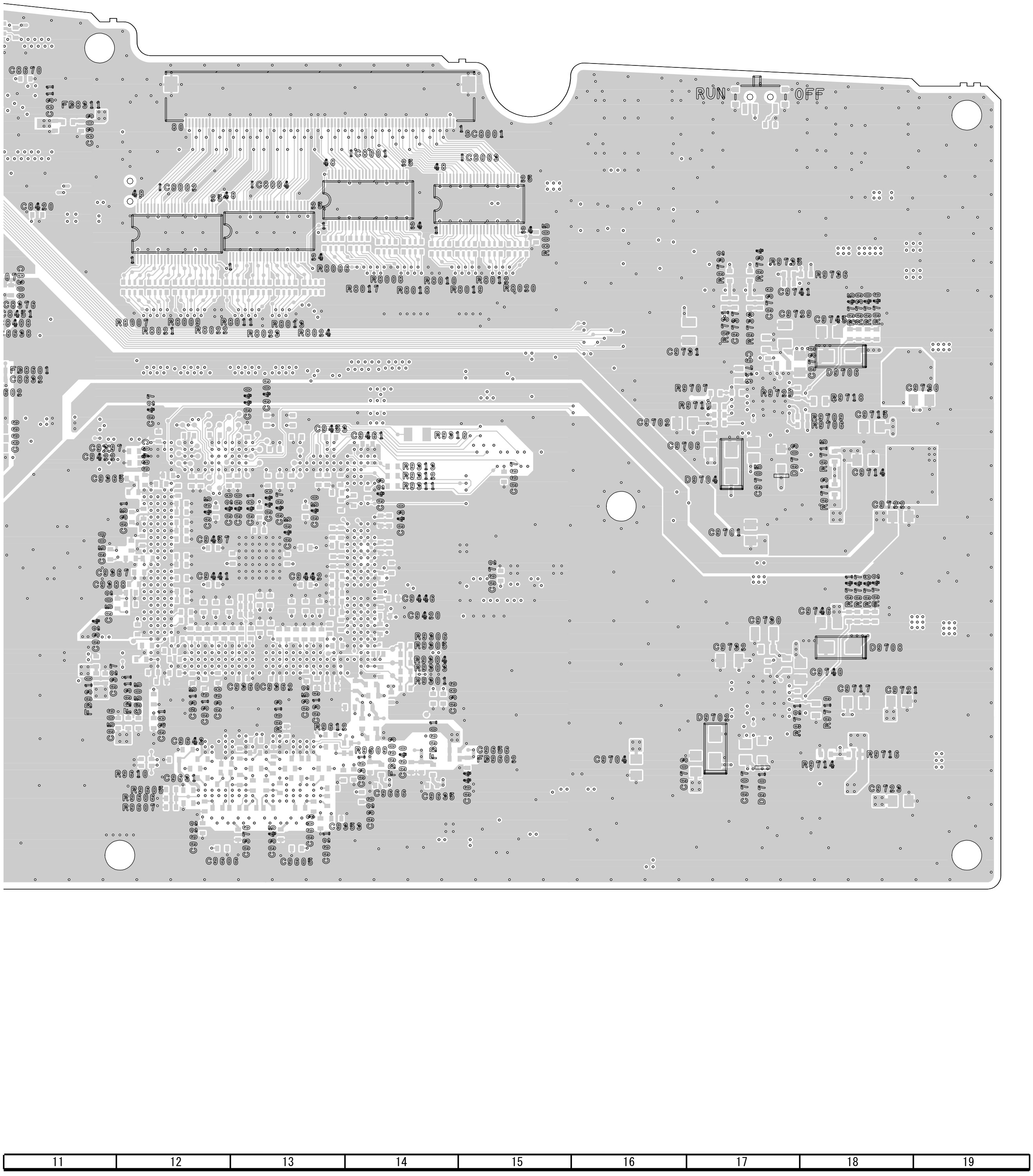
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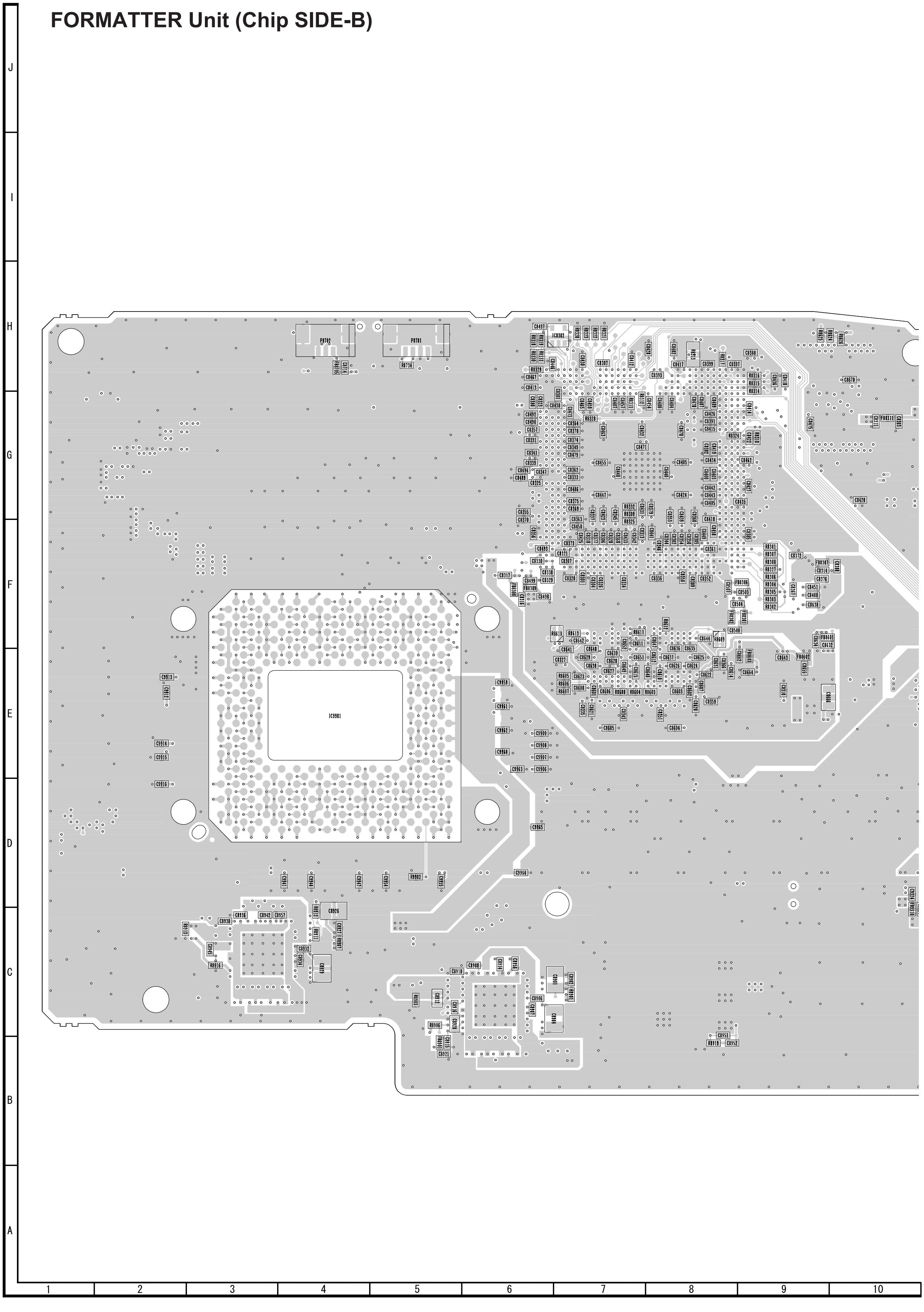
FORMATTER Unit (Chip SIDE-B)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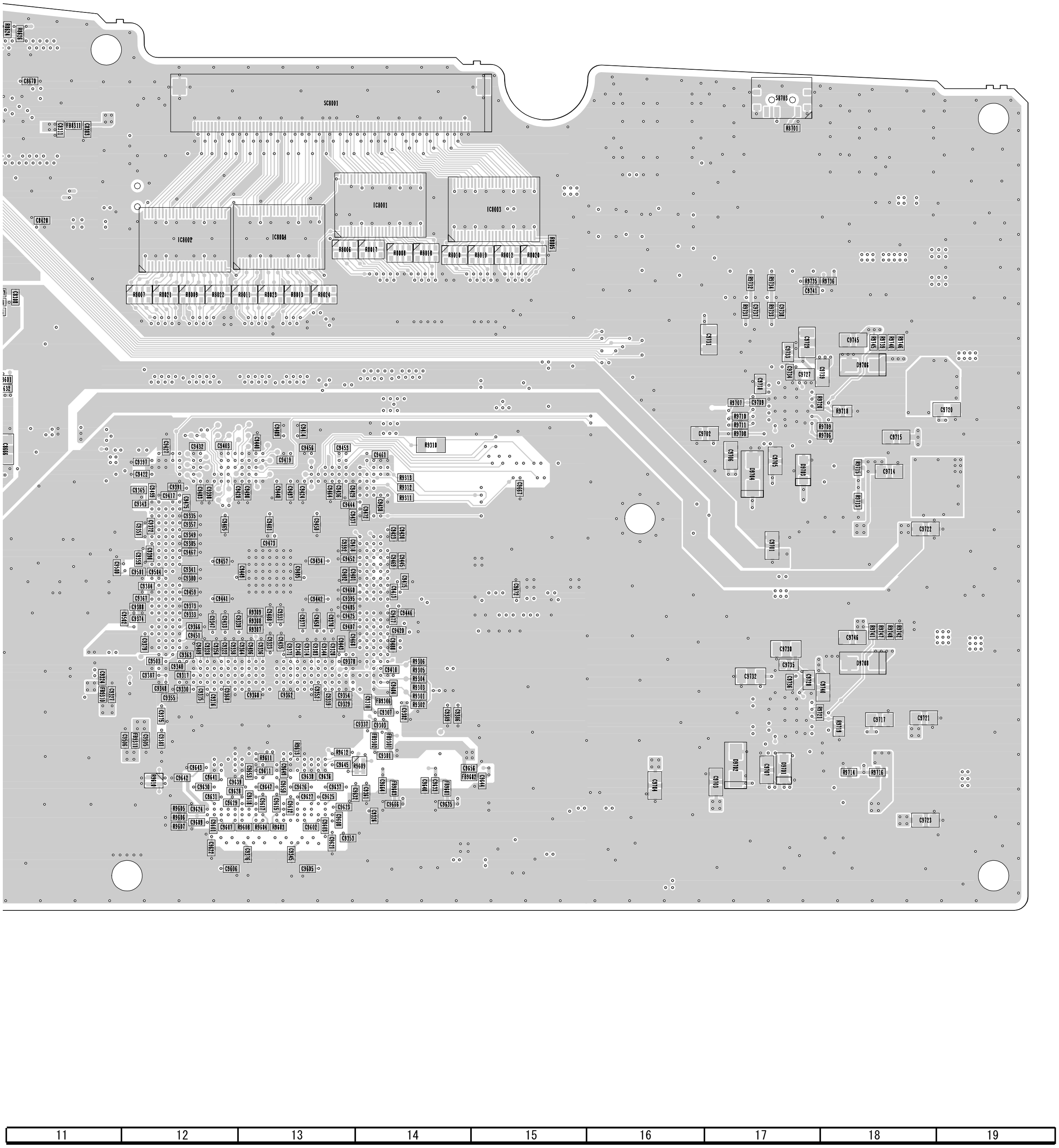
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SC8703
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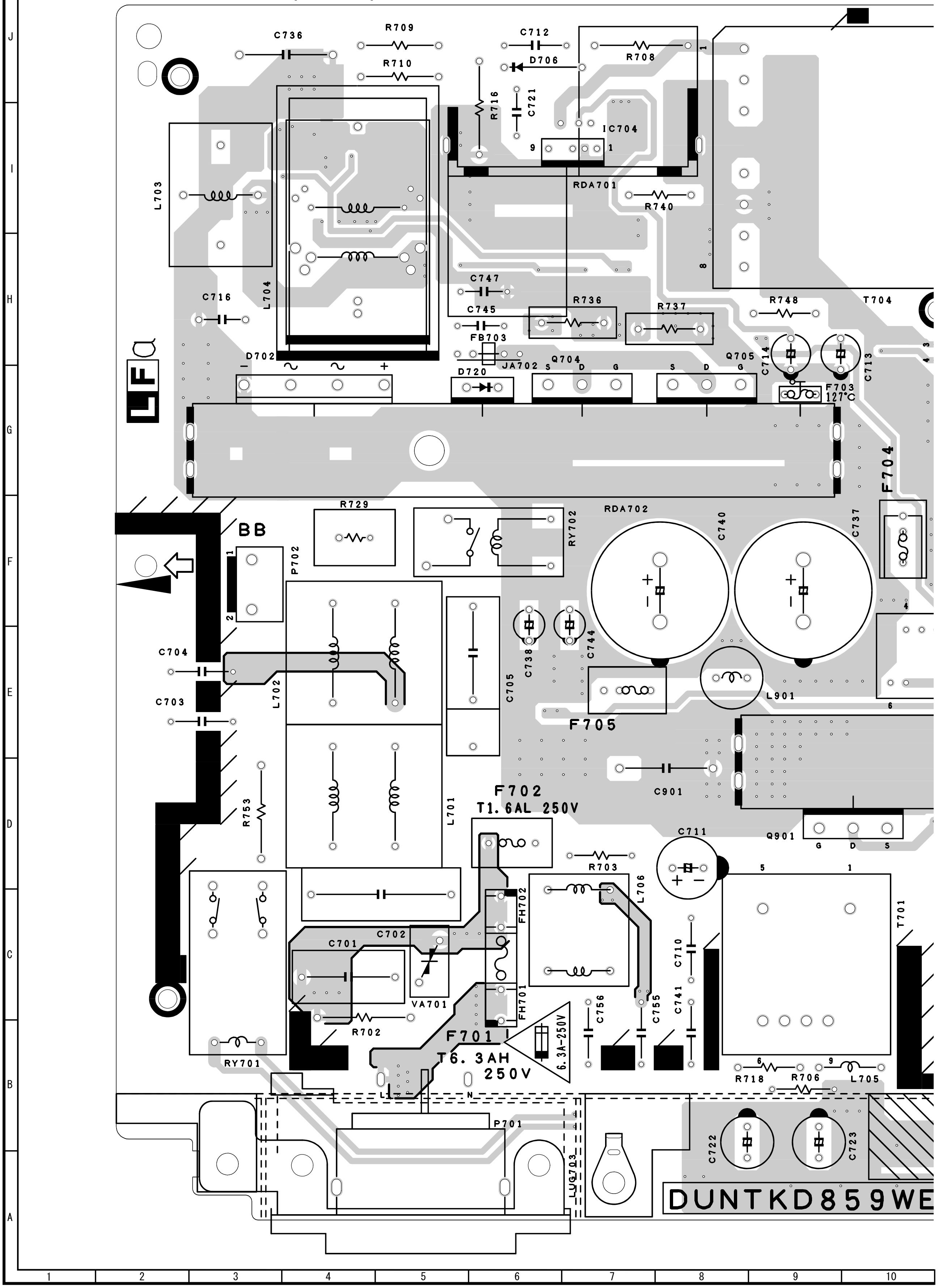
[3] POWER/BALLAST Unit

POWER/BALLAST Unit (SIDE-A)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R710
C712
D706
R708
R716
C721
IC704
RDA701
R740
L703
L704
C716
C747
C745
FB703
R736
R737
R748
T704
D702
D720
JA702
Q704
Q705
S D G
C714
C713
F703 127°C
F704
R729
RDA702
RY702
C740
C737
BB
P702
C704
C703
L702
C705
C738
C744
L901
F705
C901
R753
L701
F702
T1.6AL 250V
C711
Q901
R703
L706
FH702
FH701
C702
C701
VA701
R702
F701
T6.3AH 250V
6.3A-250V
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T701
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RY701
P701
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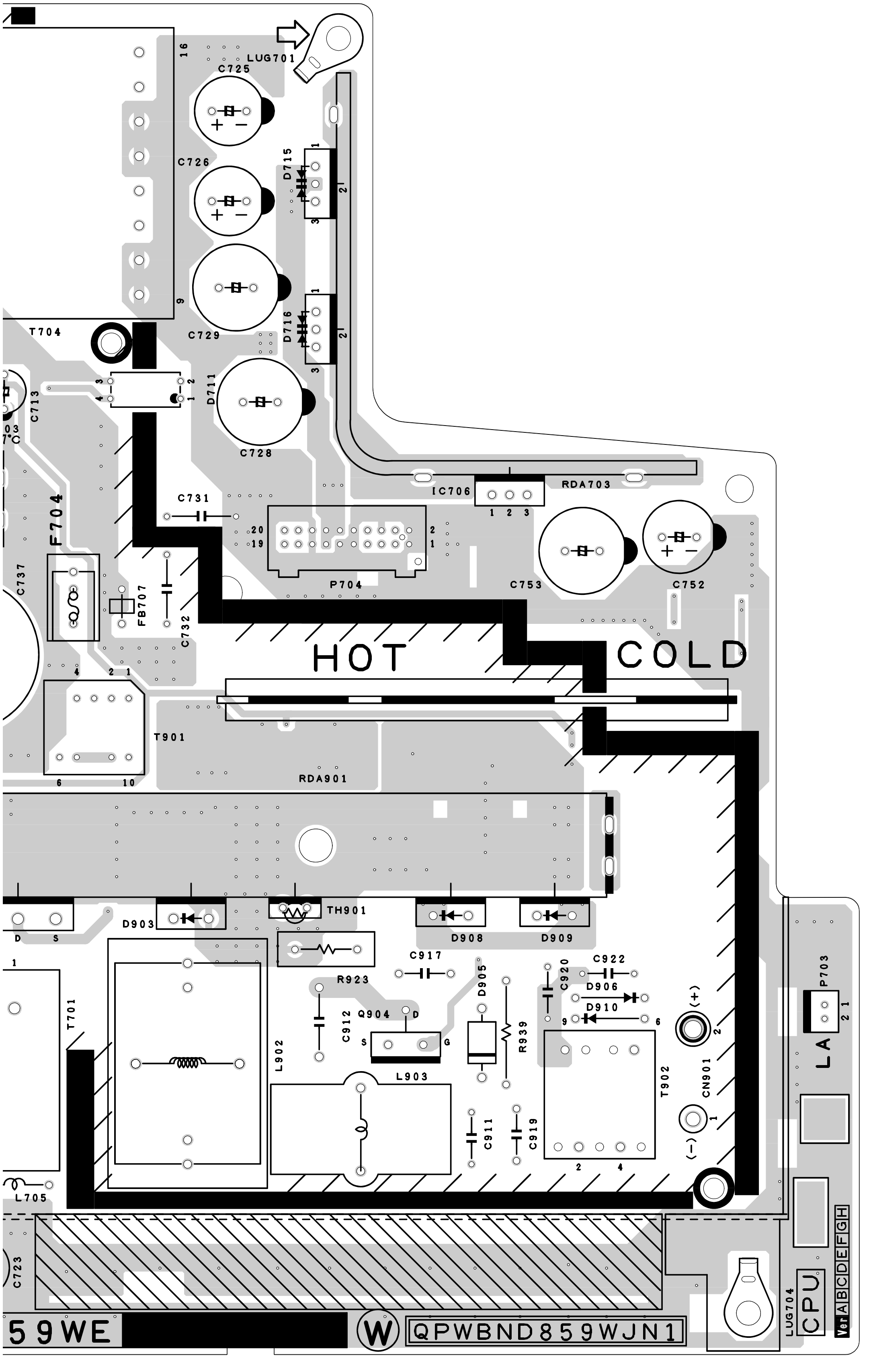
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C732
P704
IC706
RDA703
C753
C752
HOT
COLD
T901
RDA901
D903
TH901
D908
D909
R923
C917
C922
D906
D910
D905
C920
C912
Q904
R939
T701
L902
L903
C911
C919
T902
CN901
(+)
(−)
P703
LA
L705
C723
LUG704
CPU
Ver A B C D E F G H
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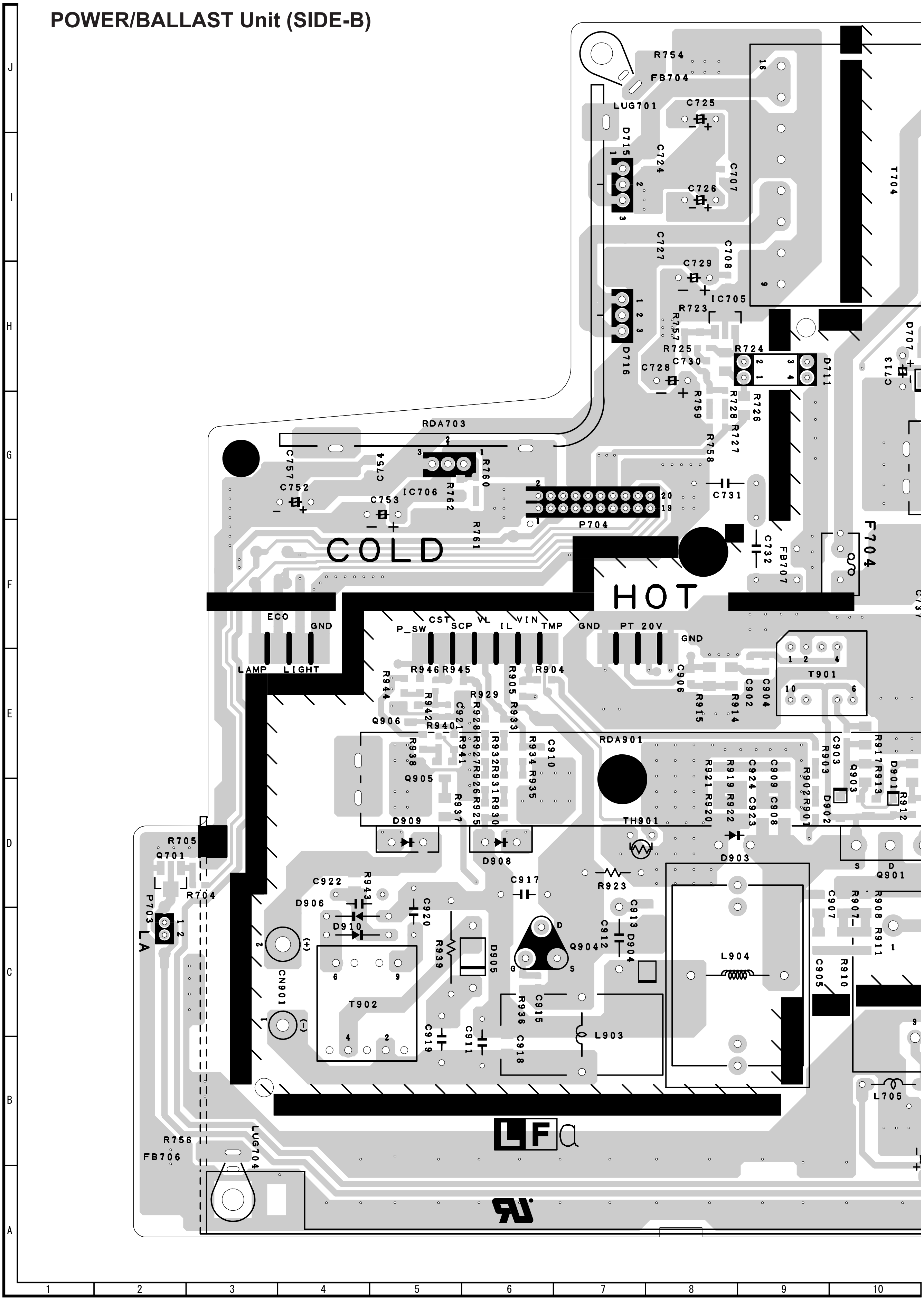
POWER/BALLAST Unit (SIDE-B)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FB704
LUG701
C725
D715
C724
C707
T704
C726
C727
C708
C729
IC705
R723
R757
D716
R725
C730
R724
D711
D707
C713
C728
R759
R728
R726
R727
R758
RDA703
C757
C754
R760
R762
IC706
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C753
R761
P704
C731
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HOT
ECO
GND
LAMP
LIGHT
P_SW
CST
SCP
VL
IL
VIN
TMP
PT 20V
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R901
D902
R912
R937
R925
R930
D909
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TH901
D903
S
D
Q901
R705
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P703
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Q904
G
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C907
R907
R908
R911
CN901
(+)
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L903
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FB706
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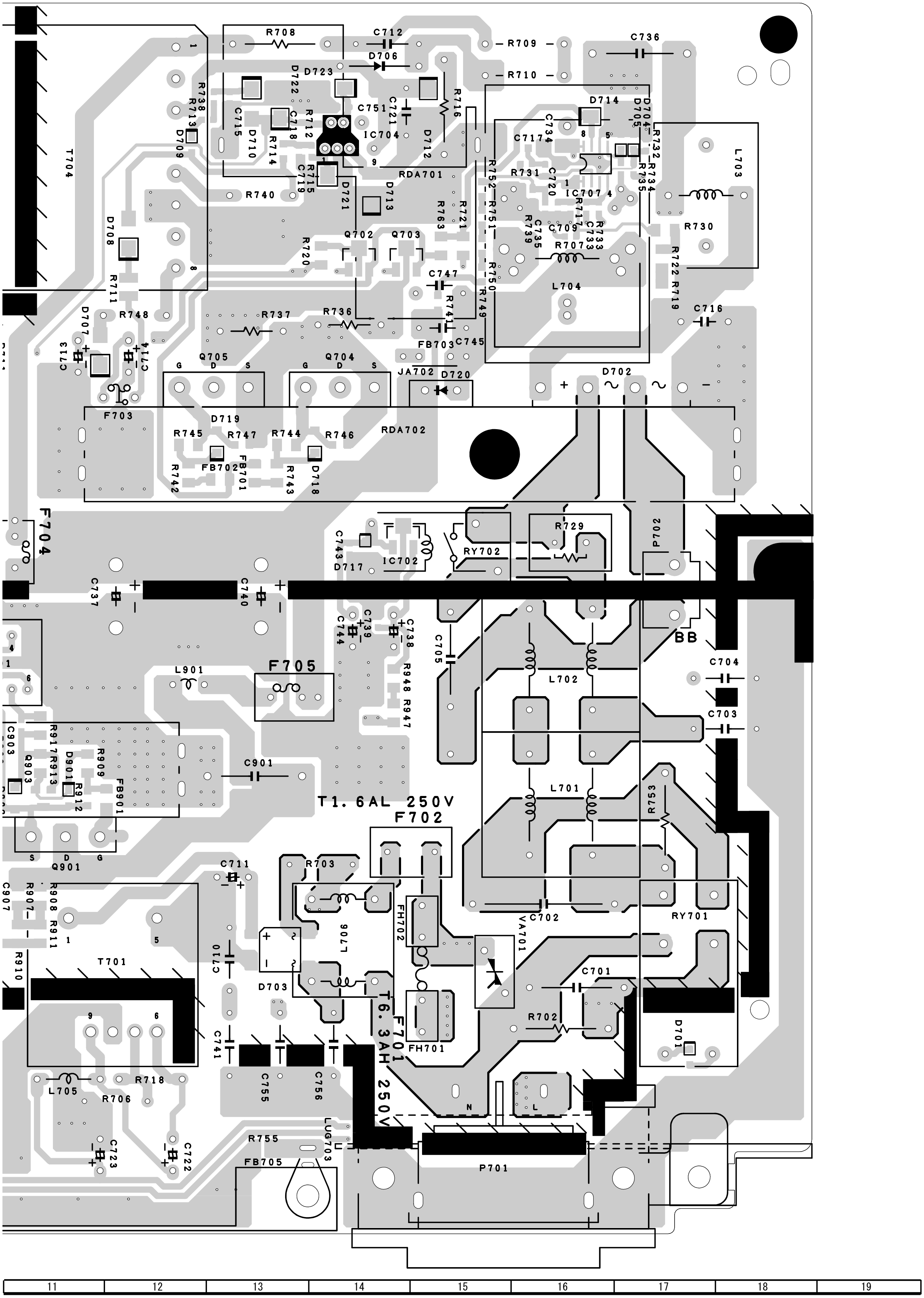
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R738
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D709
C715
D710
R714
C718
R712
C751
C721
IC704
D712
R716
D714
D704
D705
C734
C717
R732
R734
R735
L703
T704
R715
C719
D721
D713
RDA701
R752
R731
C720
IC707
R717
R740
R763
R721
R751
R739
C735
C709
R733
C733
R730
D708
Q702
Q703
R720
R707
R722
R719
L704
R711
C747
R750
R749
R748
R737
R736
R741
C716
D707
C713
C714
FB703
C745
Q705
Q704
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S
JA702
D720
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F703
D719
R745
R747
R744
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FB701
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F704
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IC702
RY702
R729
P702
D717
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C740
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C744
C738
C705
BB
C704
L901
F705
R948
R947
L702
C703
C903
R917
R913
Q903
D901
R909
R912
FB901
C901
L701
R753
T1.6AL 250V
F702
Q901
C711
R703
C907
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R908
R911
R910
T701
L706
FH702
VA701
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RY701
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D703
C701
F701
T6.3AH 250V
R702
D701
C741
FH701
C755
C756
L705
R718
R706
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LUG703
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P701
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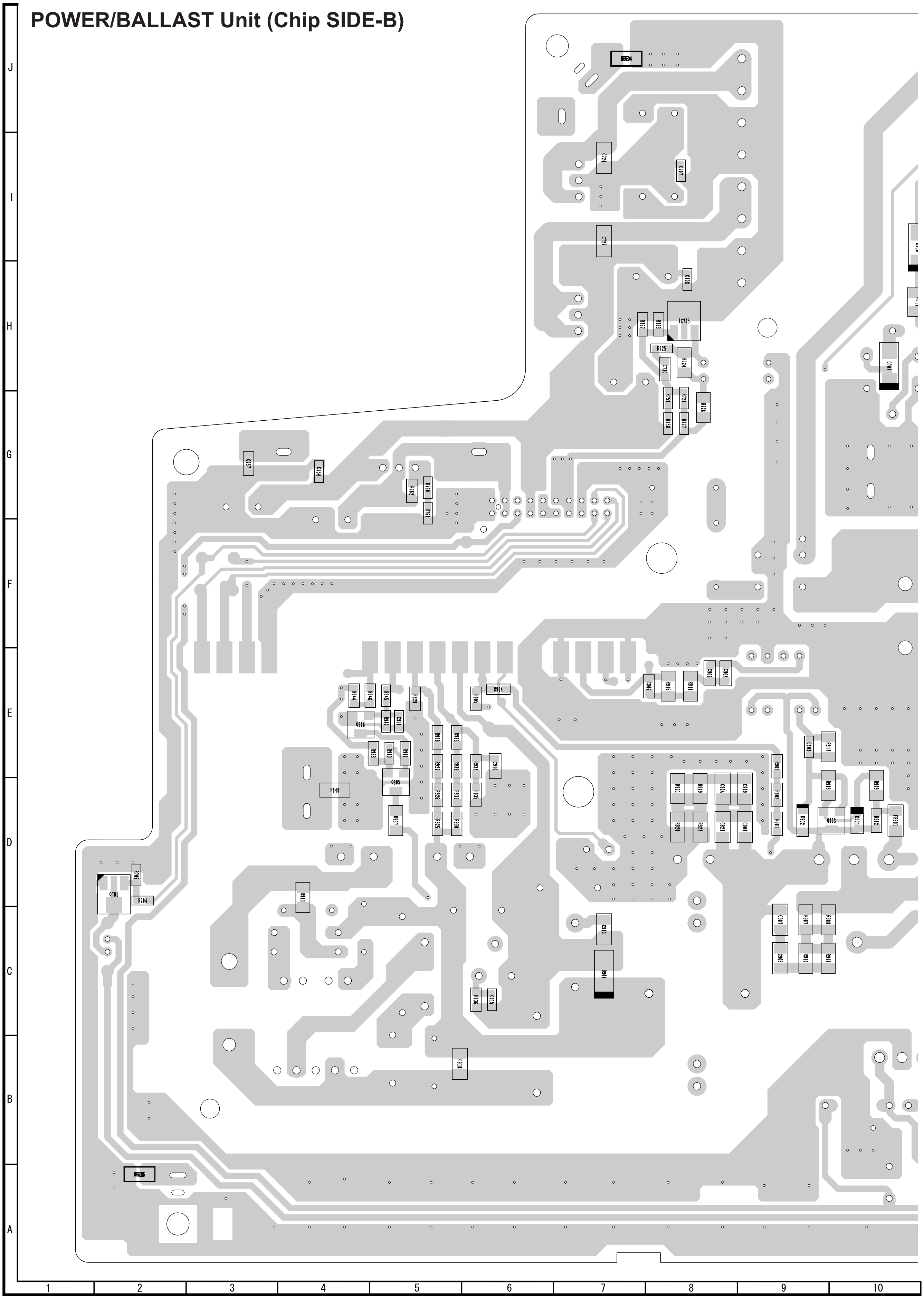
POWER/BALLAST Unit (Chip SIDE-B)


J
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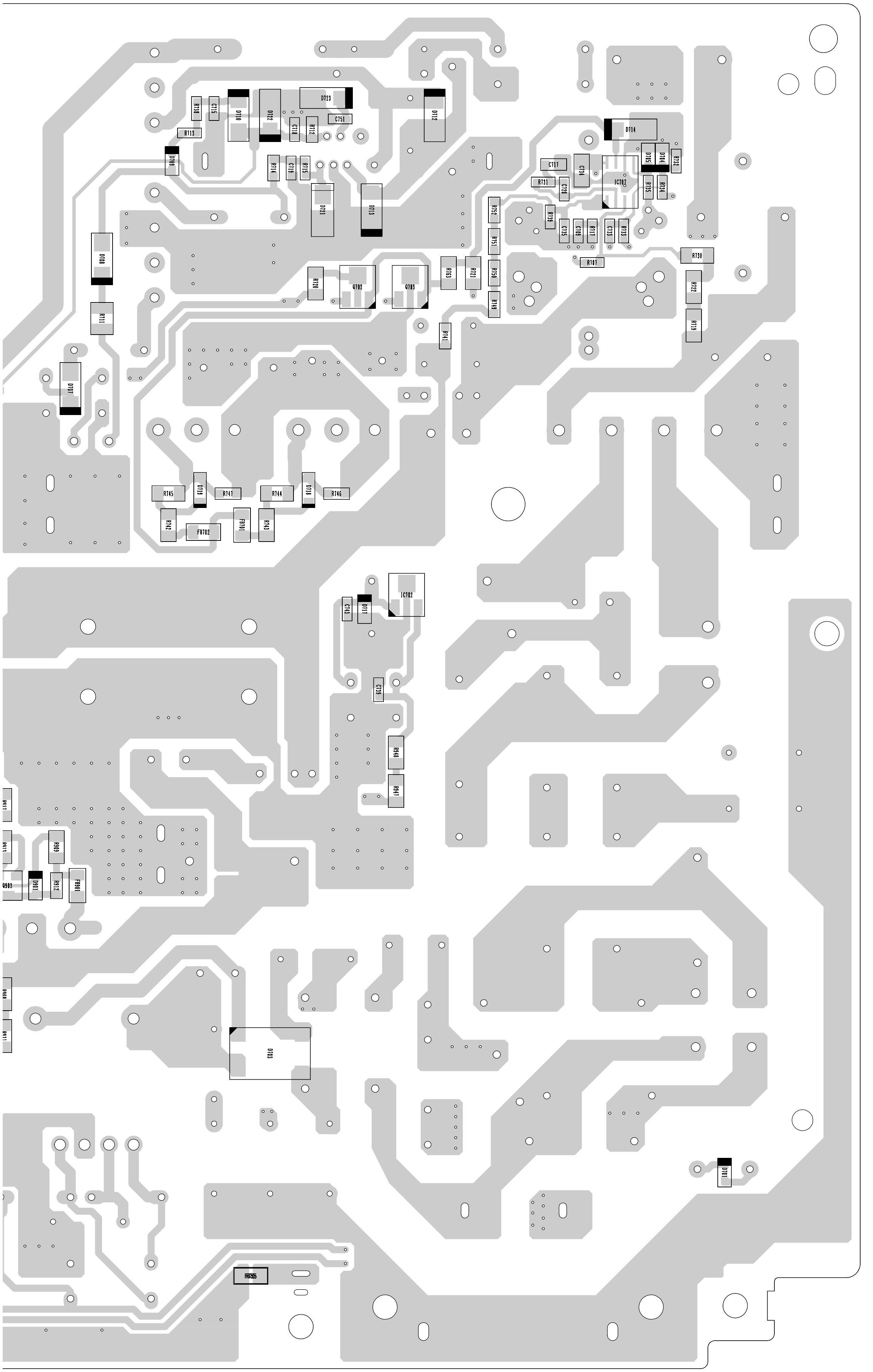
IC705
Q701
Q903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C718
R712
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C719
R715
D721
D713
D714
D716
D715
R732
C717
C734
IC707
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C728
R752
R751
R750
R749
R107
R730
R722
R720
Q702
Q703
R741
D708
R711
D707
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D718
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R742
FB702
FB701
R743
IC702
C743
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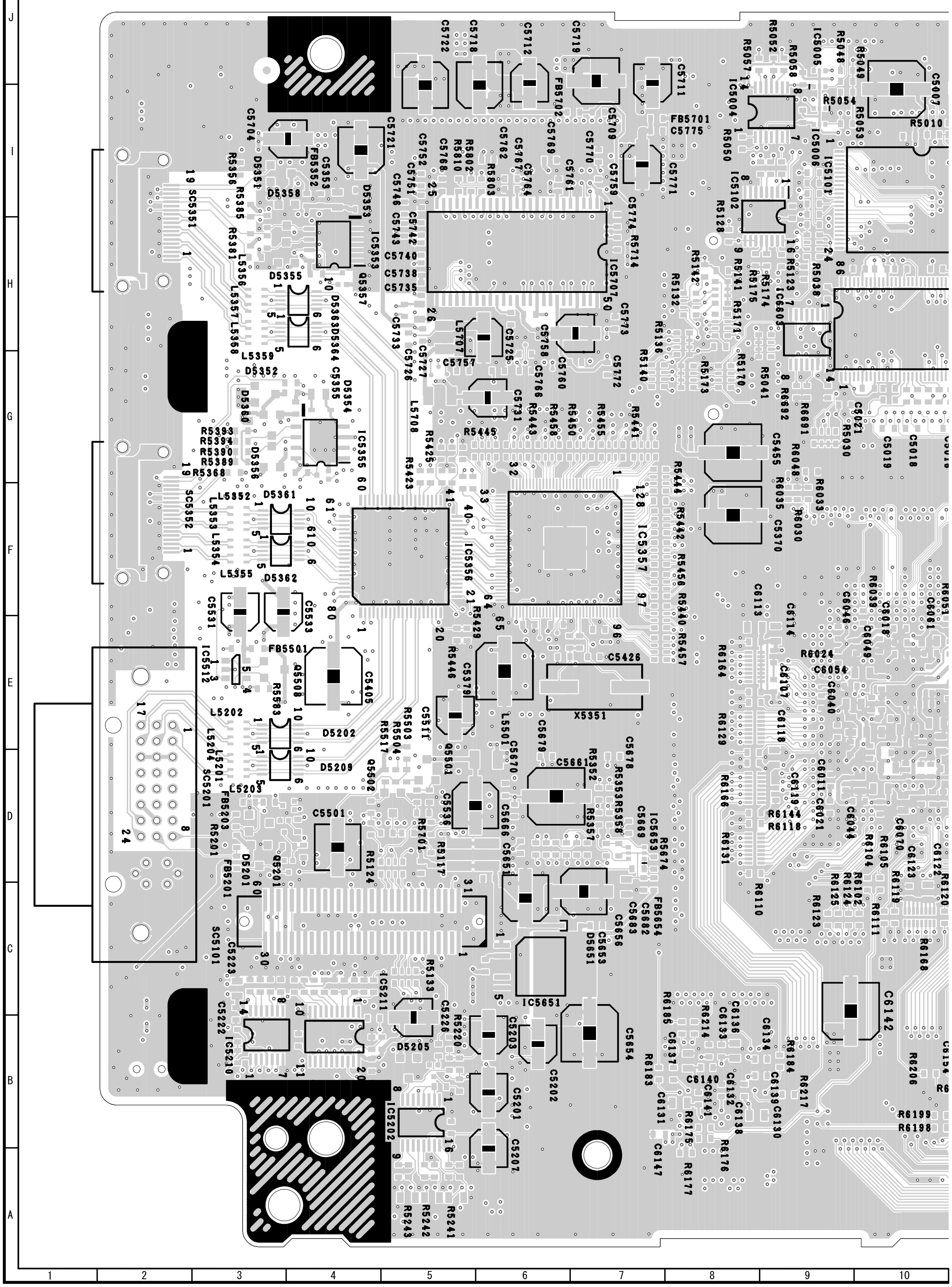
[4] PC I/F Unit

PC I/F Unit (SIDE-A)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IC5356
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SC5201
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IC5211
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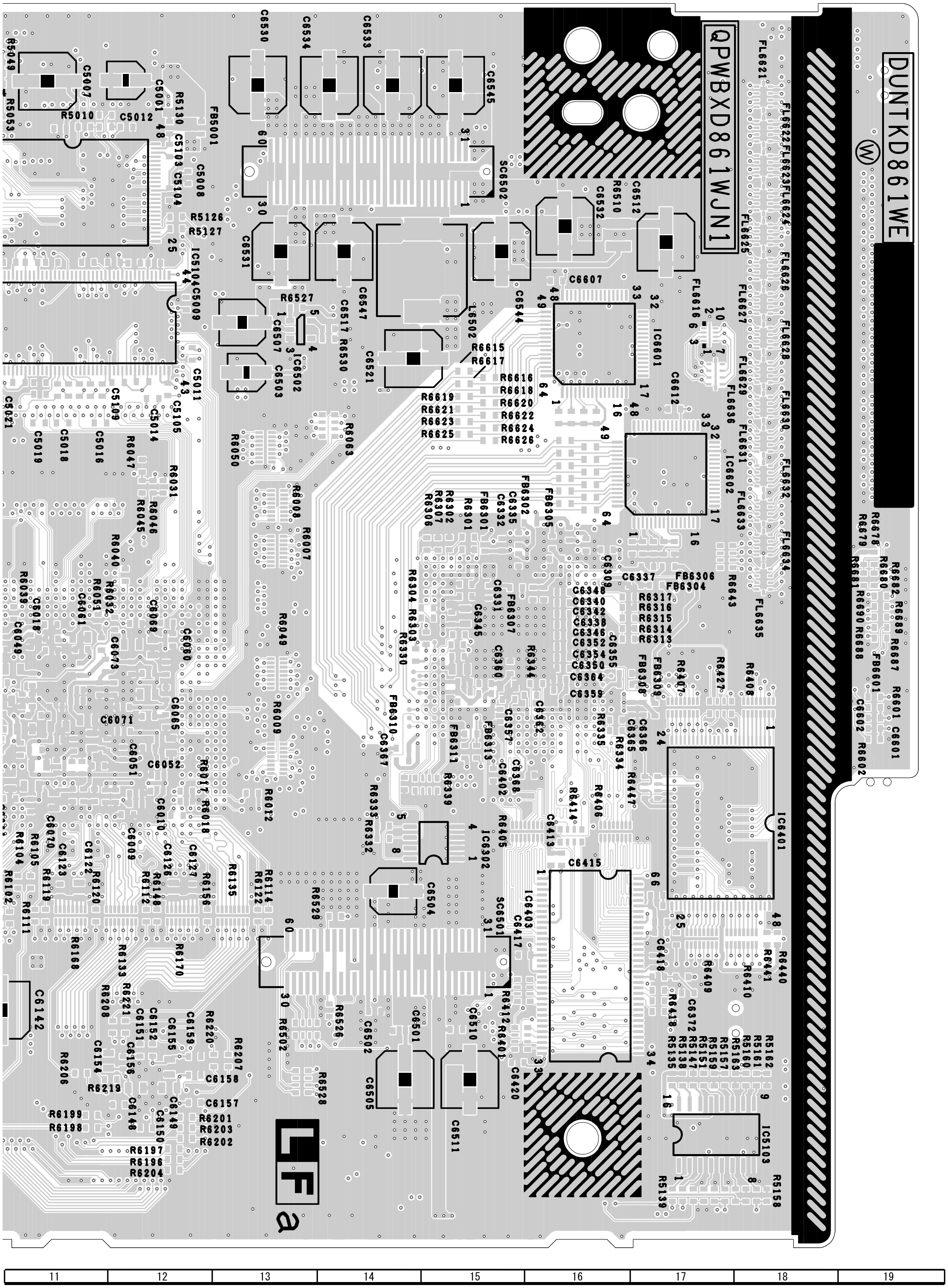
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a
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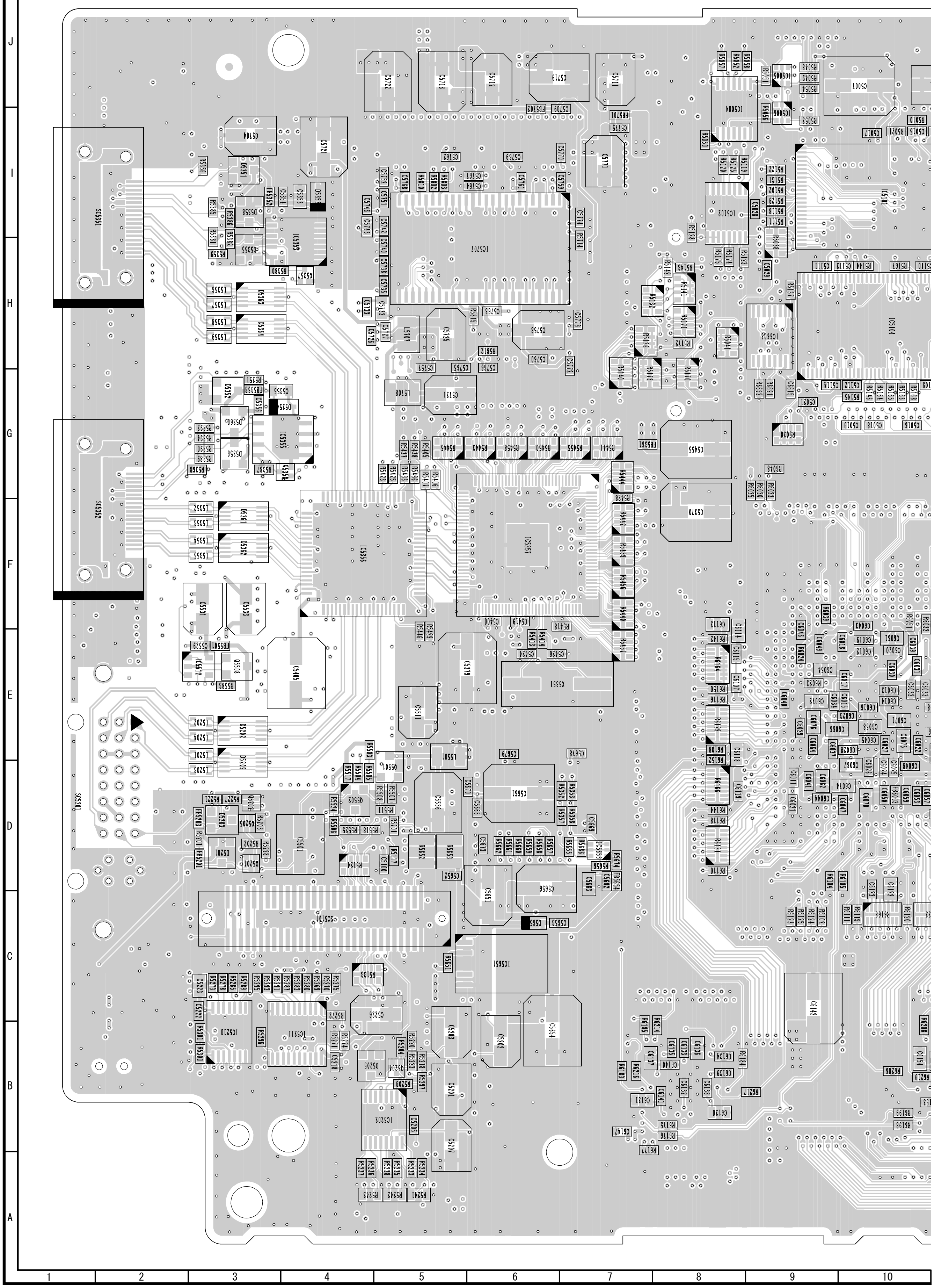
PC I/F Unit (Chip SIDE-A)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SC5352
SC5201
SC5101
IC5707
IC5357
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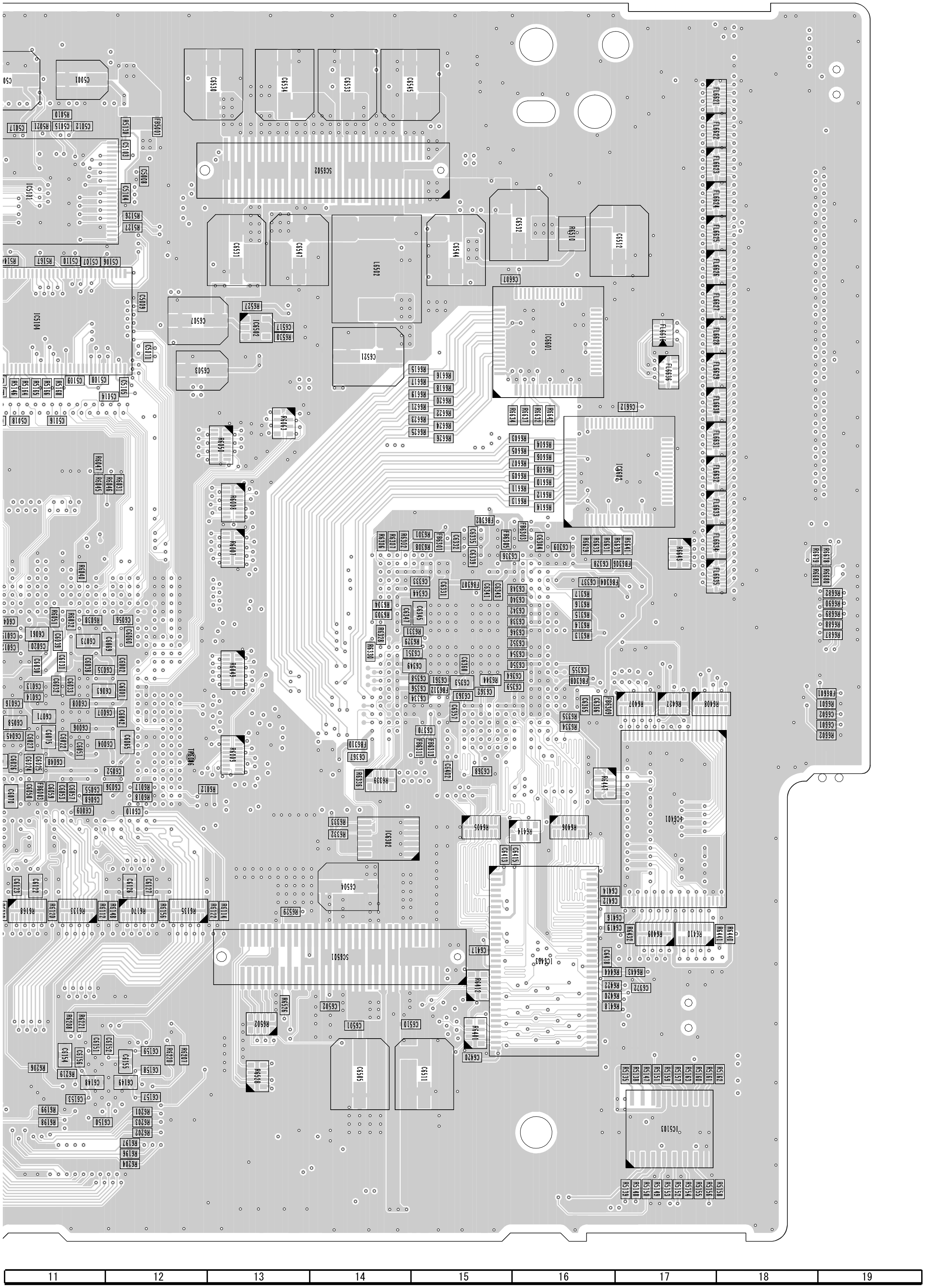
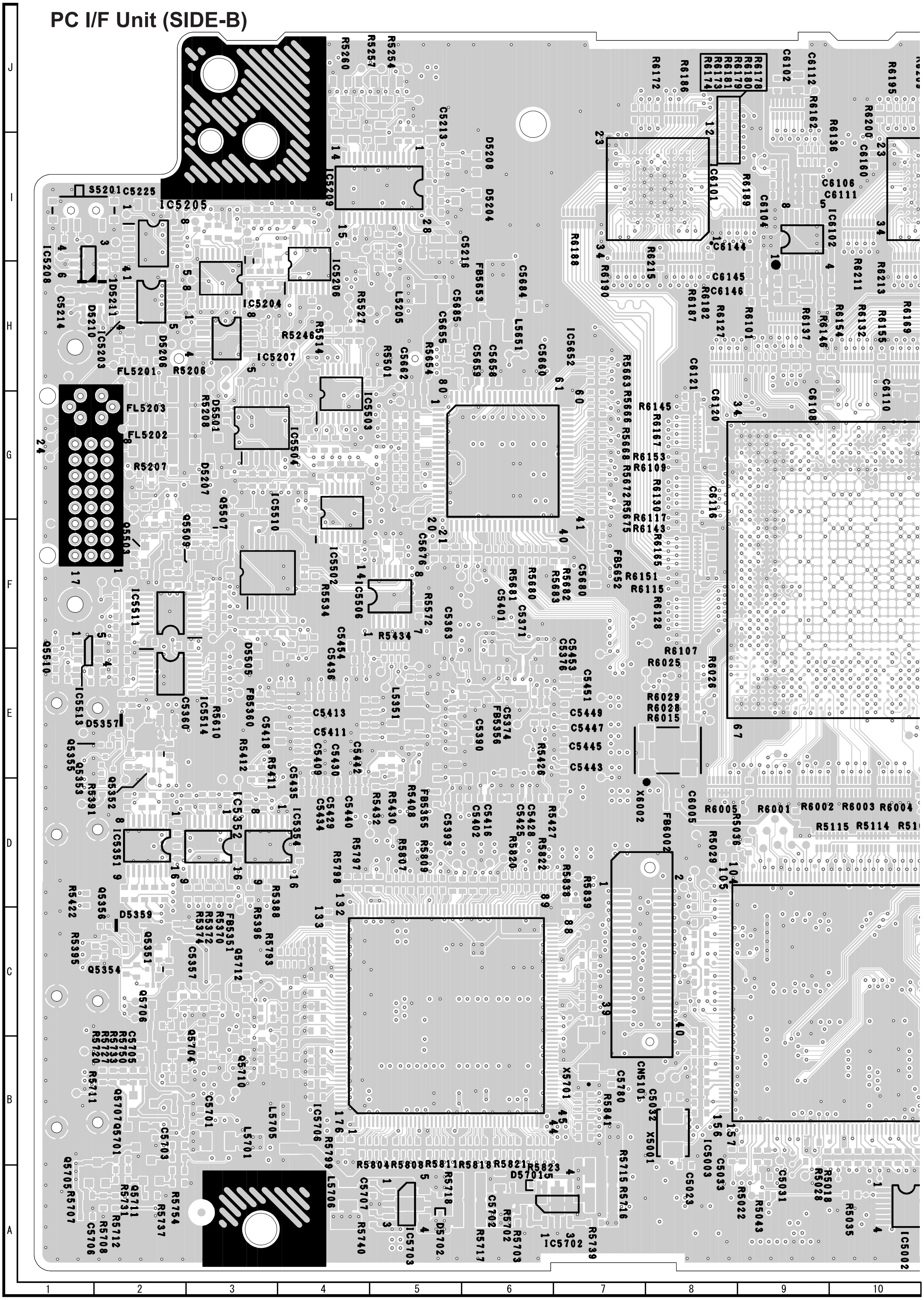


PC I/F Unit (SIDE-B)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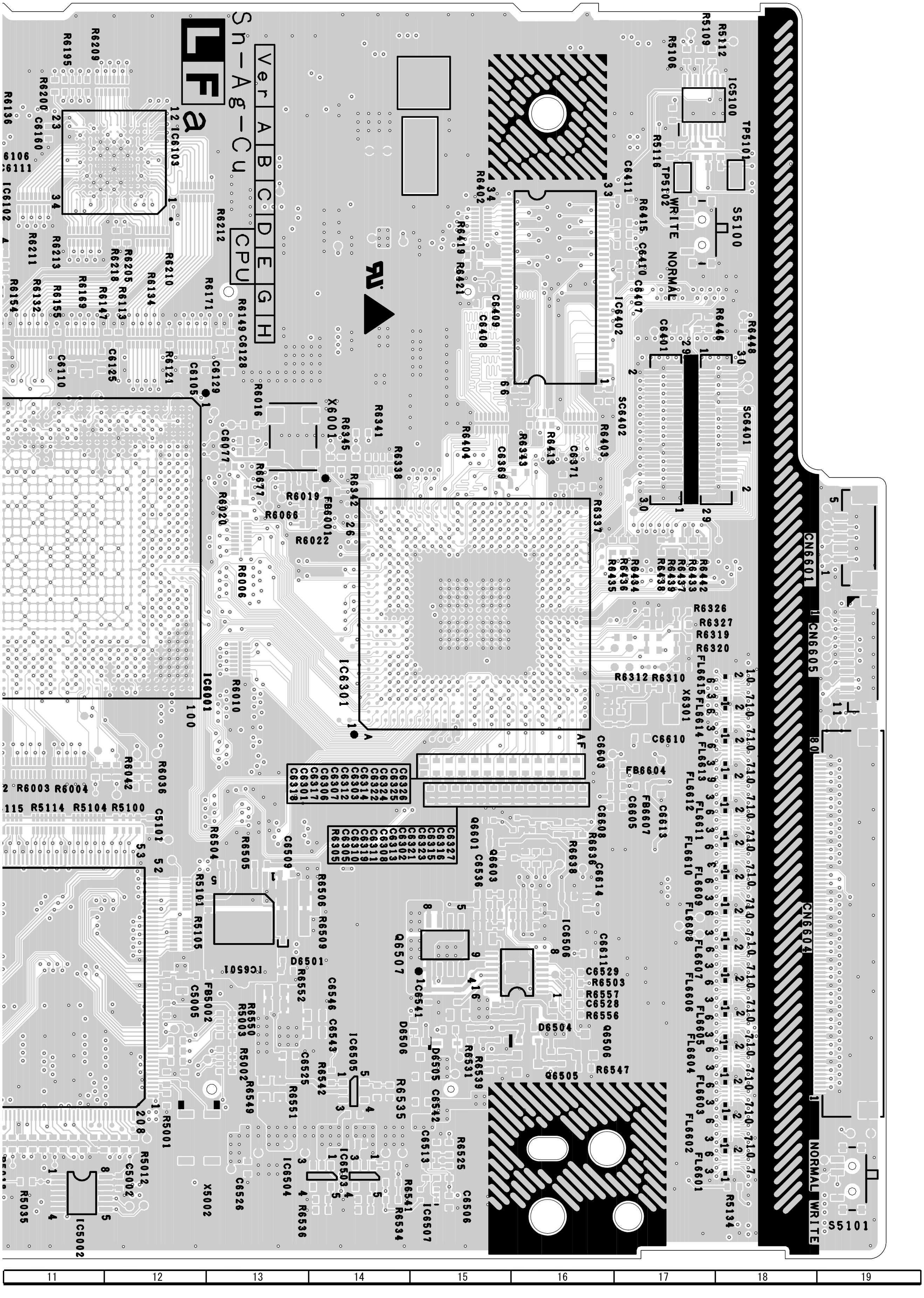
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SC6402
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X5002
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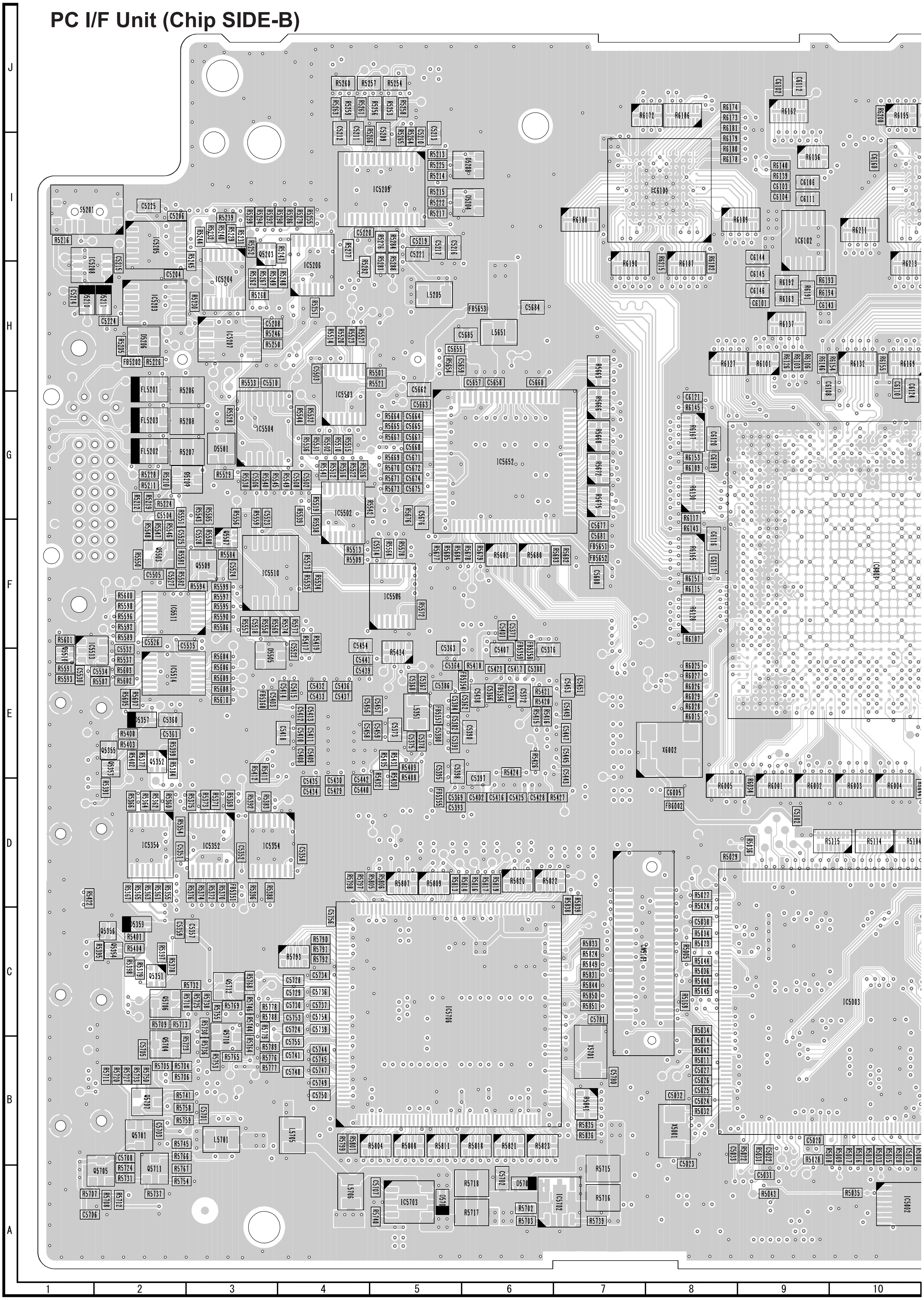
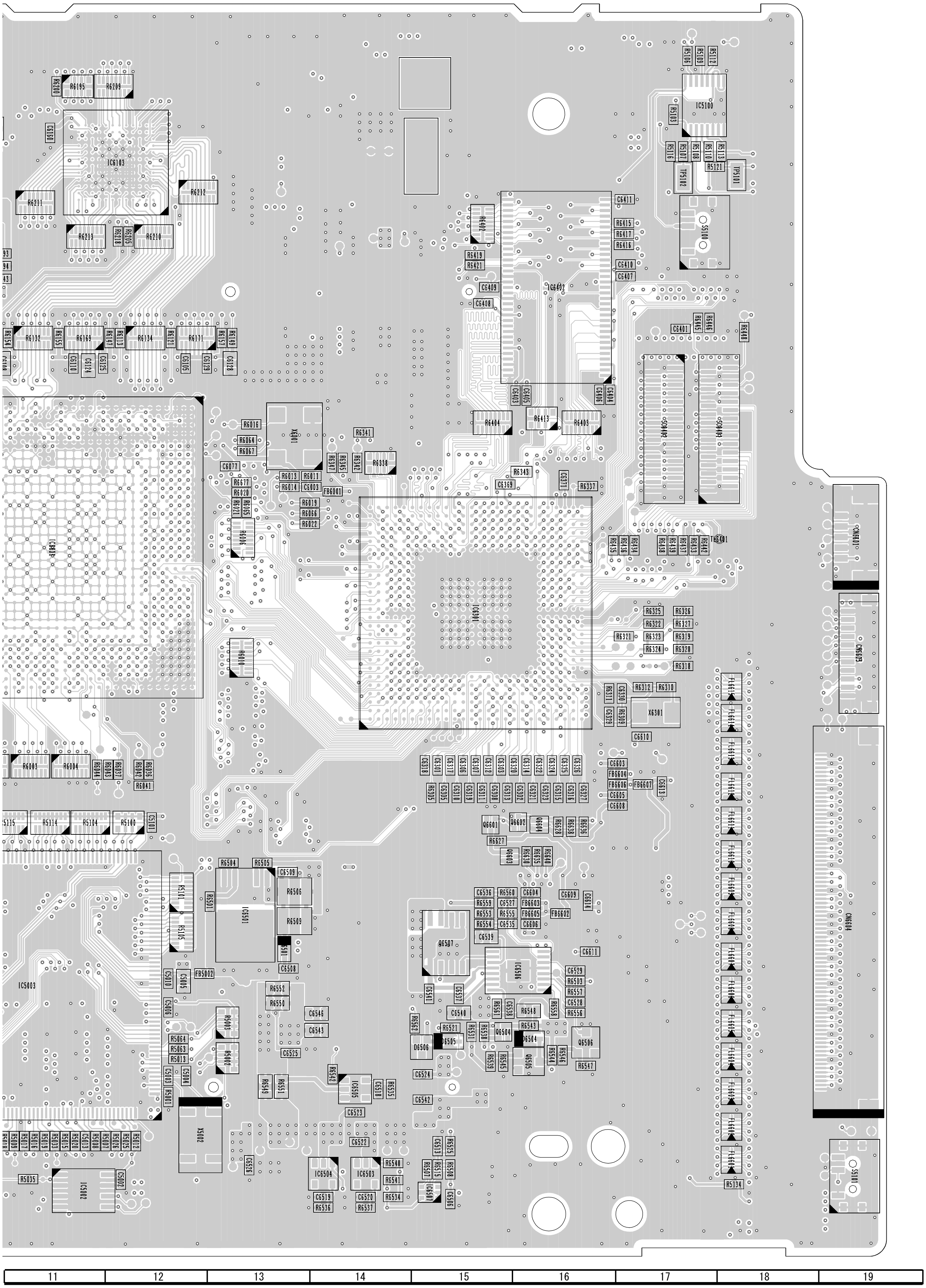
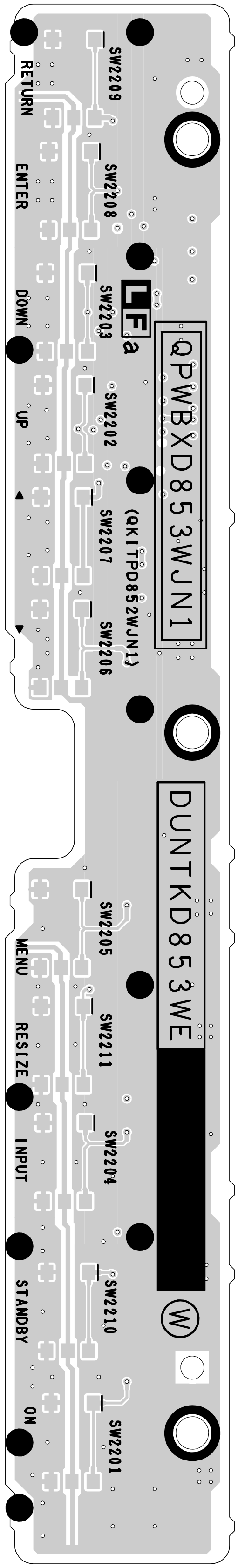
R5035
R5134
C6326 C6325 C6324 C6322 C6314 C6313 C6312 C6307 C6306 C6303 C6302 C6301 C6317 C6318
C6327 C6316 C6315 C6323 C6321 C6313 C6308 C6319 C6320 C6309 C6310 C6304 R6305 R6306
11
12
13
14
15
16
17
18
19

PC I/F Unit (Chip SIDE-B)

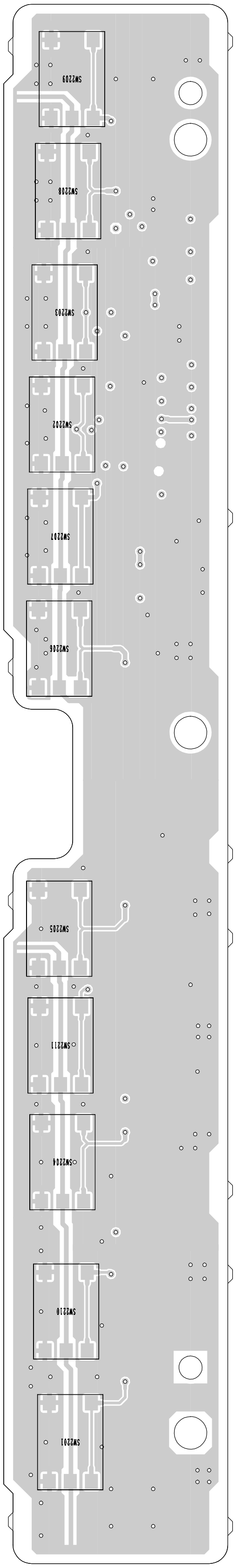

J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC5209
IC6103
IC6102
IC5205
IC5206
IC5204
IC5203
IC5207
IC5503
IC5504
IC5652
IC5502
IC5510
IC5506
IC5511
IC5513
IC5514
IC5353
IC5352
IC5354
IC5706
IC5003
IC5703
IC5702
X6002
X5701
X5001
L5205
L5651
L5701
L5705
L5706
FL5201
FL5203
FL5202
D5501
D5505
Q5509
Q5503
Q5355
Q5352
Q5351
Q5701
Q5705
Q5711


IC6103
IC6402
IC5100
S5100
IC6301
X6001
X6301
IC6401
IC6403
CN6601
CN6603
CN6604
IC6501
Q6507
IC6506
IC5003
X5002
IC5002
IC6505
IC6504
IC6503
S5101
11
12
13
14
15
16
17
18
19

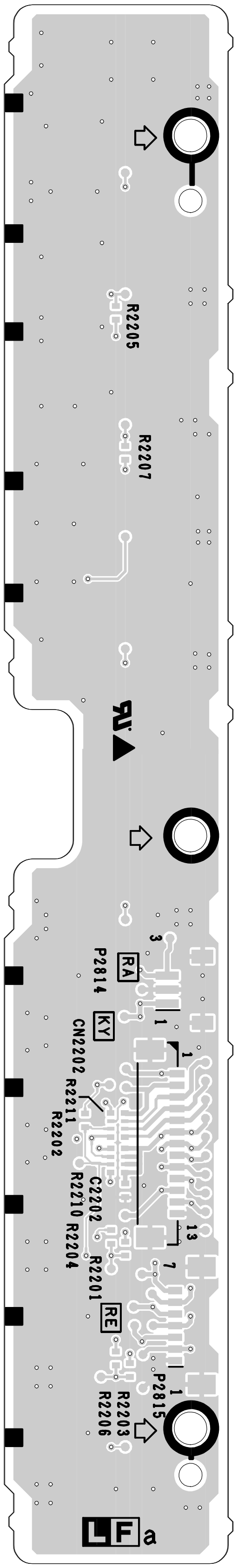
[5] KEY Unit


SW2209
RETURN
SW2208
ENTER
SW2203
DOWN
SW2202
UP
SW2207
SW2206
QPWBXD853WJN1
(QKITPD852WJN1)
DUNTKD853WE
SW2205
MENU
SW2211
RESIZE
SW2204
INPUT
SW2210
STANDBY
SW2201
ON
W

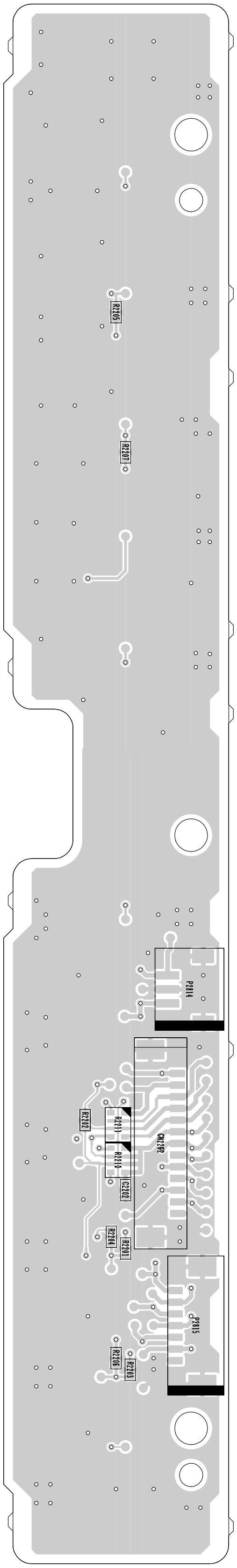
KEY Unit (SIDE-A)


SW2209
SW2208
SW2203
SW2202
SW2207
SW2206
SW2205
SW2211
SW2204
SW2210
SW2201

KEY Unit
(Chip SIDE-A)

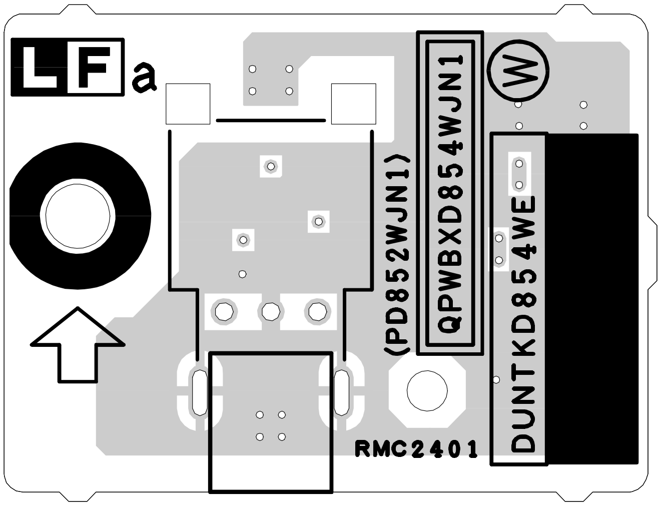

R2205
R2207
3
P2814
RA
1
KY
CN2202
R2211
R2202
C2202
R2210
R2204
13
7
R2201
RE
1
R2203
R2206
P2815

KEY Unit (SIDE-B)

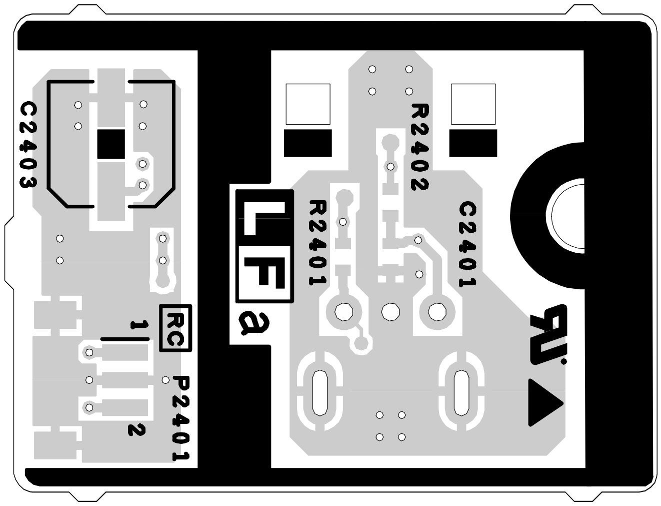

R2205
R2207
P2814
CN2202
R2202
R2211
R2210
C2202
R2204
R2201
P2815
R2206
R2203

KEY Unit
(Chip SIDE-B)

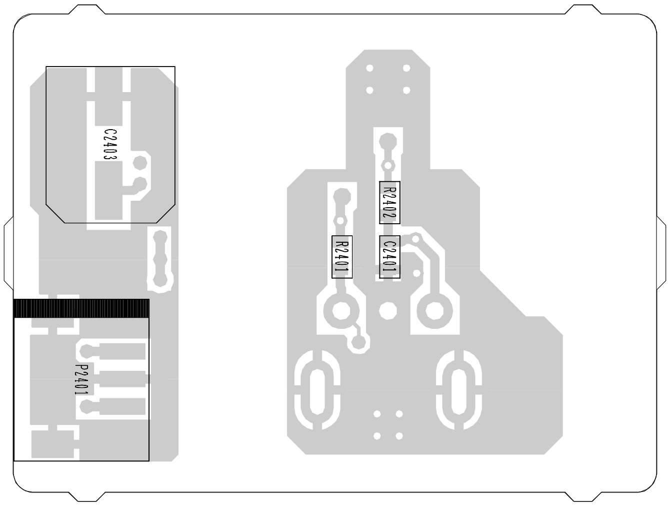
[6] R/C Front Unit


LF a
W
QPWBXD854WJN1
(PD852WJN1)
DUNTKD854WE
RMC2401

R/C FRONT Unit (SIDE-A)

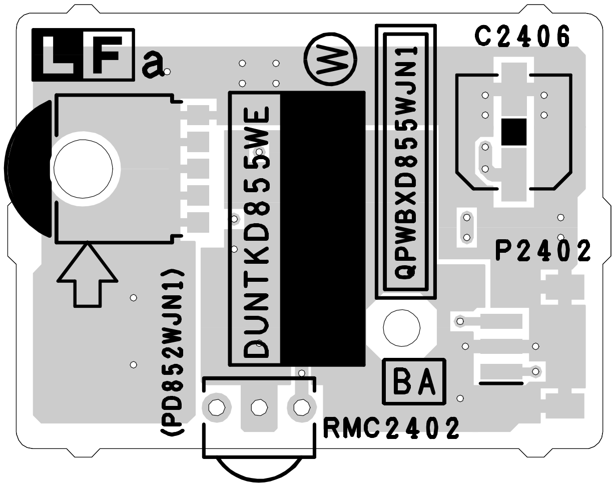

C2403
R2402
R2401
C2401
LF a
RC
1
2
P2401

R/C FRONT Unit (SIDE-B)

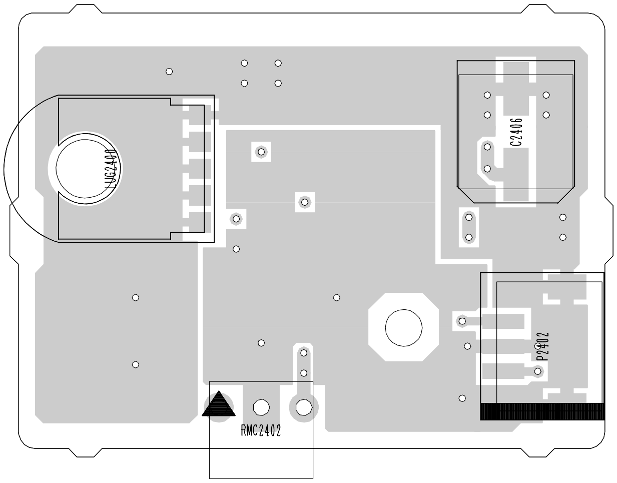

C2403
R2402
R2401
C2401
P2401
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

R/C FRONT (Chip SIDE-B)

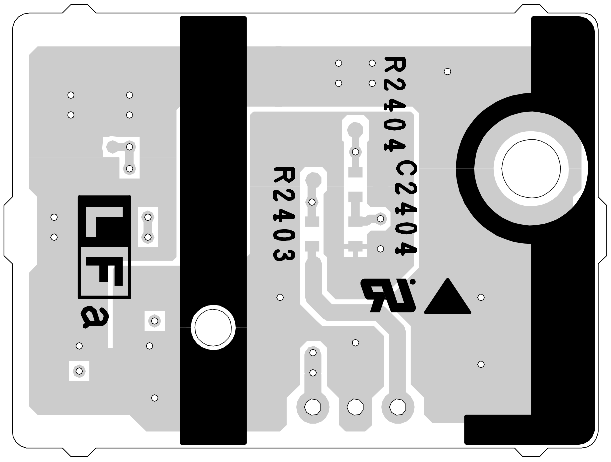
[7] R/C Rear Unit


LF a
W
QPWBXD855WJN1
DUNTKD855WE
C2406
P2402
(PD852WJN1)
BA
RMC2402

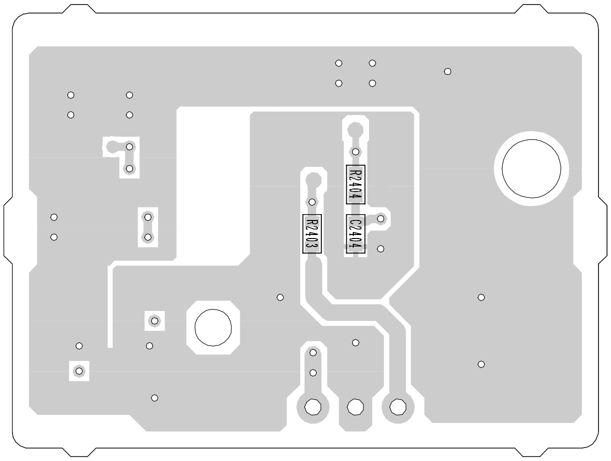
R/C REAR Unit (SIDE-A)


C2406
UG2401
P2402
RMC2402

R/C REAR Unit (Chip SIDE-A)

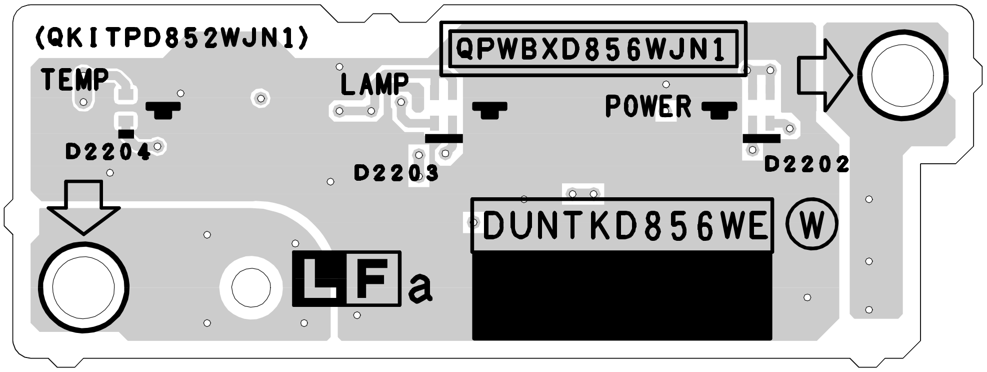

R2404
C2404
R2403
LF a

R/C REAR Unit (SIDE-B)

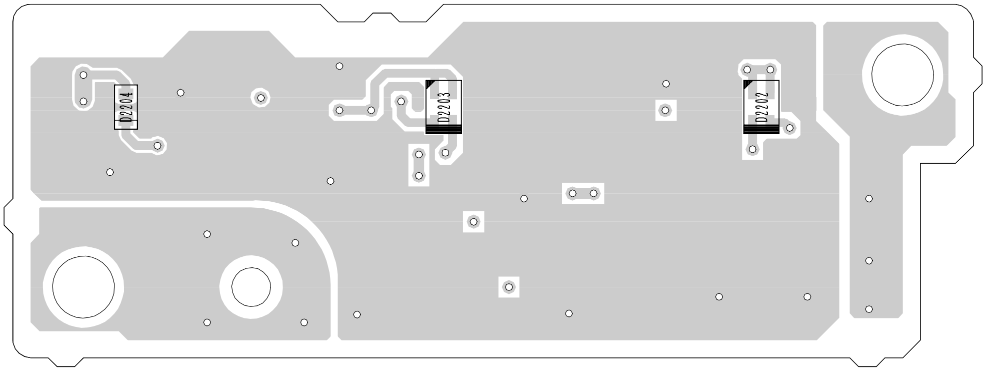

R2404
R2403
C2404

R/C REAR Unit (Chip SIDE-B)

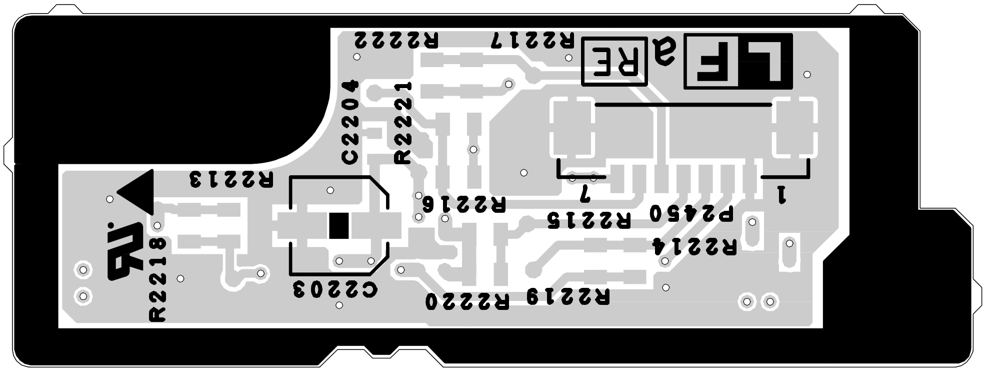
[8] LED Unit


(QKITPD852WJN1)
QPWBXD856WJN1
TEMP
LAMP
POWER
D2204
D2203
D2202
DUNTKD856WE
W
LFa

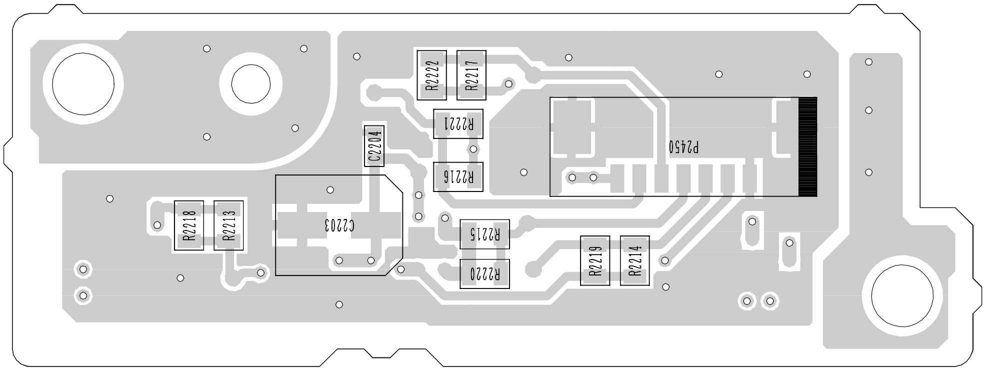
LED Unit (SIDE-A)


D2204
D2203
D2202

LED Unit (Chip SIDE-A)

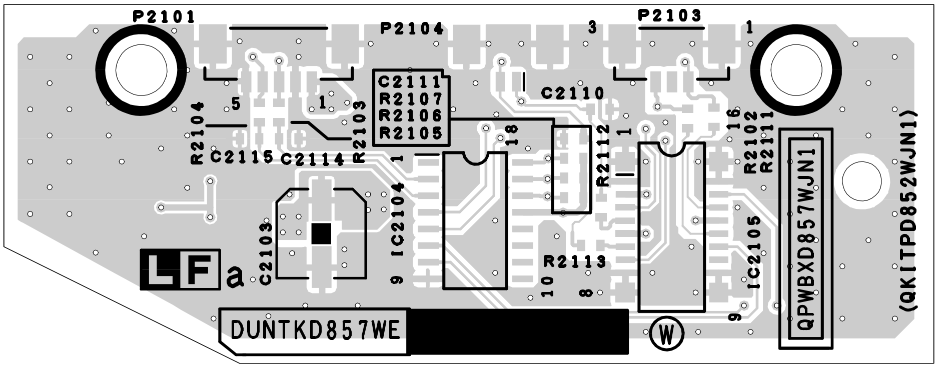

R2222
R2217
LFaRE
C2204
R2221
R2213
R2216
7
1
P2450
R2215
R2214
R2218
C2203
R2220
R2219

LED Unit (SIDE-B)

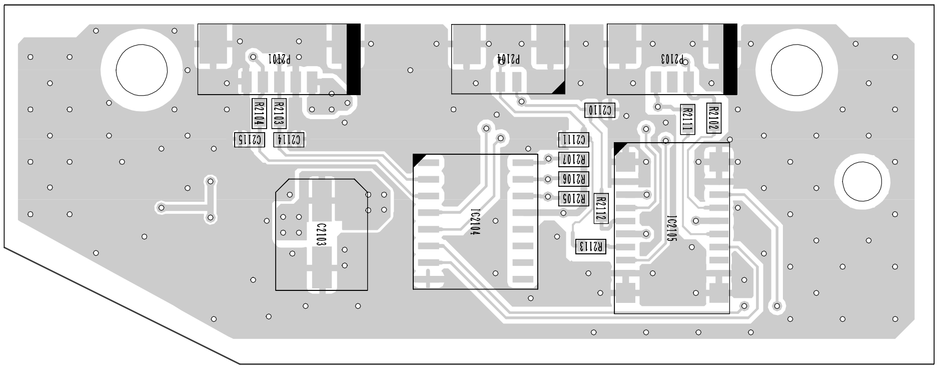

R2222
R2217
R2221
P2450
C2204
R2216
R2218
R2213
C2203
R2215
R2220
R2219
R2214

LED Unit (Chip SIDE-B)

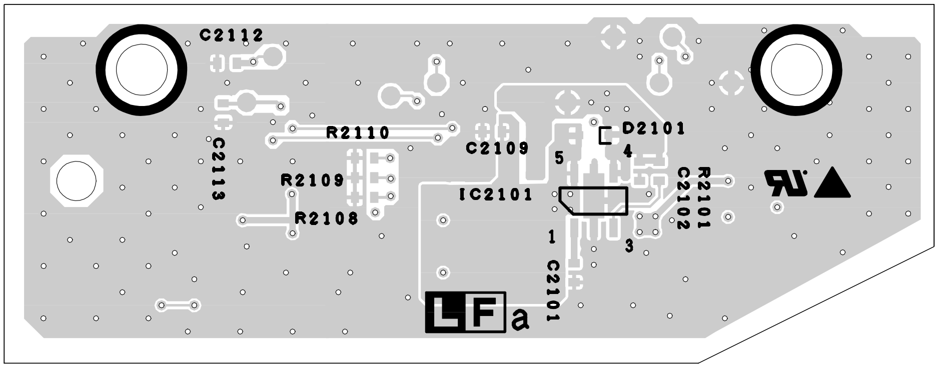
[9] IRIS DRIVE Unit


P2101
P2104
3
P2103
1
5
1
C2111
R2107
R2106
R2105
C2110
R2104
R2103
C2115
C2114
1
18
R2112
1
16
R2102
R2111
C2103
IC2104
9
R2113
10
8
IC2105
9
DUNTKD857WE
QPWBXD857WJN1
(QKITPD852WJN1)

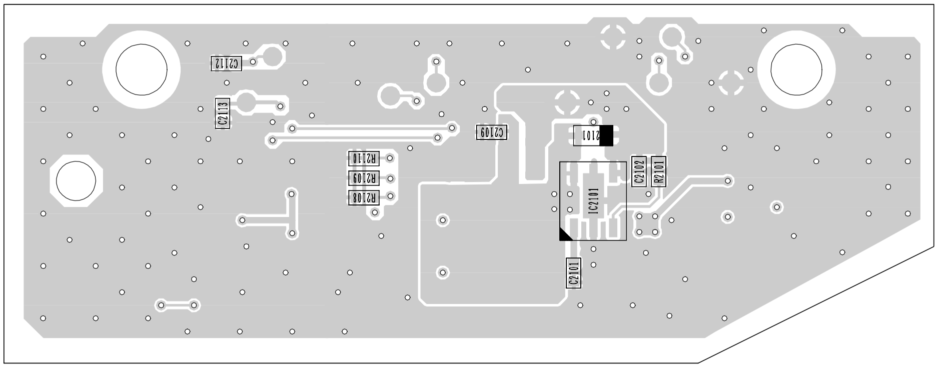
IRIS DRIVE Unit (SIDE-A)


P2101
P2104
P2103
R2104
R2103
C2115
C2114
C2110
R2111
R2102
C2111
R2107
R2106
R2105
R2112
IC2104
IC2105
C2103
R2113

IRIS DRIVE Unit (Chip SIDE-A)

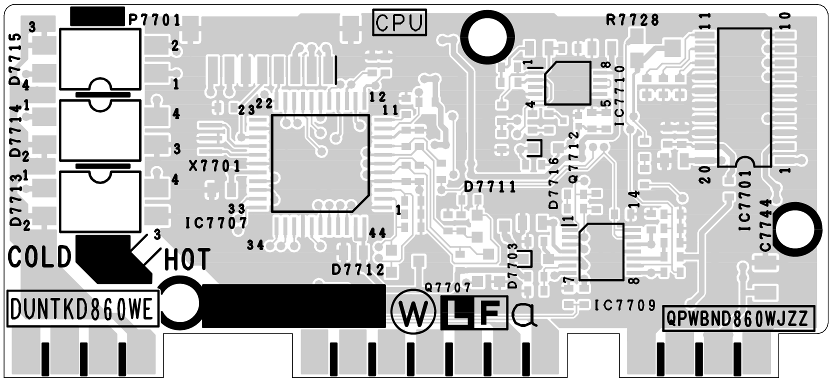

C2112
C2113
R2110
R2109
R2108
C2109
D2101
5
4
IC2101
R2101
C2102
1
3
C2101

IRIS DRIVE Unit (SIDE-B)

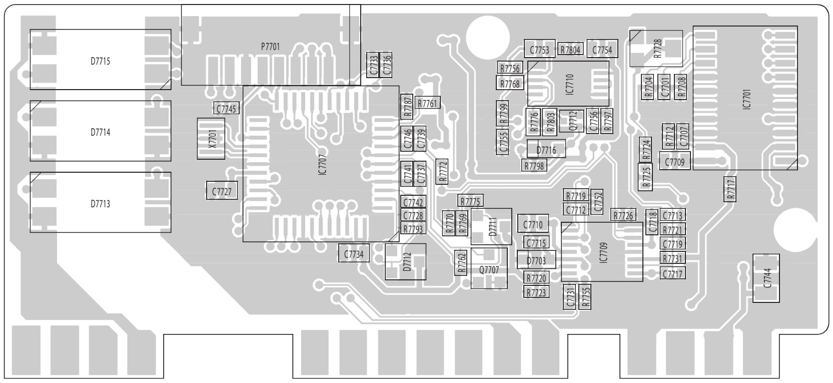

C2112
C2113
C2109
D2101
R2110
R2109
R2108
C2102
R2101
IC2101
C2101

IRIS DRIVE Unit (Chip SIDE-B)

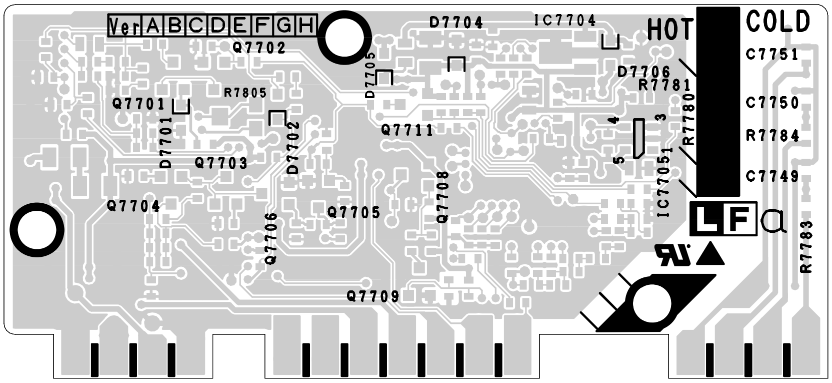
[10] BALLAST CONTROL Unit


P7701
CPU
R7728
11
10
D7715
D7714
D7713
3
2
1
4
12
11
23
22
X7701
33
IC7707
34
44
1
D7711
D7716
Q7712
IC7710
8
5
14
20
IC7701
C7744
D7703
7
IC7709
Q7707
D7712
COLD
HOT
DUNTKD860WE
W
LF
QPWBND860WJZZ

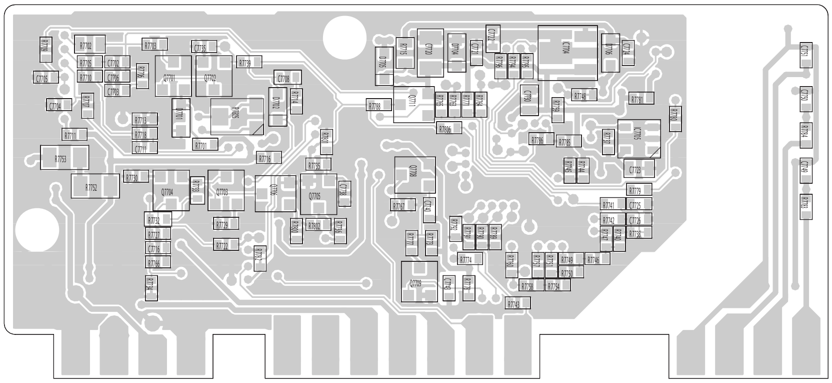
BALLAST CONTROL Unit (SIDE-A)


D7715
D7714
D7713
P7701
C7733
C7736
C7745
X7701
C7727
IC7707
R7787
R7761
C7746
C7739
C7741
C7737
R7772
C7742
C7728
R7793
C7734
D7712
R7775
R7770
R7769
D7711
R7762
Q7707
C7753
R7804
C7754
R7756
R7768
IC7710
R7799
C7755
R7776
R7803
Q7712
C7756
R7797
D7716
R7798
R7728
R7704
C7701
R7708
IC7701
R7724
R7725
R7712
C7707
C7709
R7717
R7719
C7712
C7752
R7726
C7710
C7715
D7703
R7720
R7723
C7731
R7755
IC7709
C7718
C7713
R7721
C7719
R7731
C7217
C7744

BALLAST CONTROL Unit (Chip SIDE-A)


Ver A B C D E F G H
Q7702
D7704
IC7704
HOT
COLD
C7751
D7705
D7706
R7781
C7750
R7805
Q7701
D7701
Q7703
D7702
Q7711
4
3
R7780
R7784
5
IC7705
1
C7749
Q7704
Q7705
Q7708
Q7706
LF
R7783
Q7709

BALLAST CONTROL Unit (SIDE-B)



BALLAST CONTROL Unit (Chip SIDE-B)